**UNIVERSIDAD DE GRANADA**

FACULTAD DE CIENCIAS ECONÓMICAS Y EMPRESARIALES

DEPARTAMENTO DE ORGANIZACIÓN DE EMPRESAS

TESIS DOCTORAL

# EFECTOS DE LA VELOCIDAD ORGANIZATIVA: CRISIS EN LA EMPRESA Y RESULTADOS MEDIOAMBIENTALES

# "EFFECTS OF ORGANIZATIONAL SPEED: MISHAPS AND ENVIRONMENTAL OUTCOMES"

MENCIÓN DE DOCTORADO INTERNACIONAL

MATILDE MORALES RAYA

Granada, 2015

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Programa Oficial de Posgrado en Fundamentos de Economía y Organización de Empresas Aplicados a la Competitividad Empresarial

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*A mis padres, Matilde y José*

*A mis hermanos, Ana y Jose*

*“Two roads diverged in a wood, and I took the one less traveled by*

*and that has made all the difference”*

*Robert Frost*

*“All change is hard at first, messy in the middle,*

*and so gorgeous at the end”*

*Robin Sharma*

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# CAPÍTULO 1

# INTRODUCCIÓN

# 1.1 Introducción al Tema Objeto de Estudio

## 1.1.1 Introducción

La globalización ha sido impulsada por una vertiginosa aparición de nuevas tecnologías que han magnificado la necesidad de actuar con rapidez (Barkema, Baum y Mannix, 2002). A nivel individual, preferimos como medio de transporte el avión que nos permite llegar antes a nuestro destino, los mensajes de texto frente a escribir cartas, o el microondas en lugar de cocinar a fuego lento. La cultura de la inmediatez está instaurada en la forma de vivir contemporánea. A nivel corporativo, las empresas se enfrentan a rápidos cambios en la demanda, en los competidores de la industria y en la tecnología que dan lugar a entornos muy inestables, turbulentos e impredecibles (Baum y Wally, 2003). Entornos altamente dinámicos en los que se enfatiza la rapidez en la toma de decisiones para que las empresas sigan siendo competitivas (Eisenhardt, 1989).

El fenómeno de la velocidad organizativa es concurrente con la creciente preocupación a nivel mundial por los problemas medioambientales. En la segunda mitad del siglo XXI, la actividad del ser humano ha cambiado los ecosistemas de forma más rápida y extensiva que en ningún otro período de la historia (Hoffman y Bansal, 2012). La contaminación de gases de efecto invernadero, el agujero de la capa de ozono, el cambio climático, la lluvia ácida, o la extinción de especies son algunos de los problemas medioambientales actuales.

Desde que en 1987 la Comisión Mundial para el Medio Ambiente y el Desarrollo (WCED) adoptó el término desarrollo sostenible, como aquél que “satisface las necesidades actuales de las personas sin comprometer la capacidad de las futuras generaciones para satisfacer las suyas" (WCED, 1987), se han sucedido cumbres y convenciones por parte de la comunidad internacional para aunar esfuerzos y promover

la preservación del medio ambiente. En 1992, por ejemplo, se celebró en Río de Janeiro la Conferencia de Naciones Unidas sobre Medio Ambiente y Desarrollo Sostenible, en 2009 tuvo lugar la XV Cumbre Mundial sobre Cambio Climático en Copenhague, y recientemente, del 30 de noviembre al 11 de diciembre de 2015, se ha celebrado la vigésimo primera Conferencia de las Partes de la Convención Marco de Naciones Unidas sobre el Cambio Climático, también conocida como "París 2015," con el objetivo de mantener el calentamiento global por debajo de los dos grados centígrados.

Las empresas son consideradas, cada vez con mayor intensidad, como la causa de los problemas medioambientales (Hoffman y Bansal, 2012). El impacto de las actuaciones de las empresas no sólo se circunscribe al medio ambiente sino también al conjunto de la sociedad. Casos como el de Enron en 2001, o la retirada de 500.000 botellas de Dasani, marca de agua embotellada de Coca-Cola, por contener niveles excesivos de bromato en 2004 en Reino Unido, constituyen algunos ejemplos de actuaciones empresariales que suponen un riesgo para la sociedad, y su vez, adquieren el alcance de crisis empresariales. En los últimos años, ha habido números casos de crisis empresariales relacionadas con aspectos de gobierno corporativo, diversidad, derechos humanos, con las relaciones con los empleados, y con los productos. La globalización, tecnologías novedosas que surgen y cuyo entendimiento no es completo, cambios en el clima político, y entornos sociales cambiantes configuran el contexto actual para el surgimiento de las crisis empresariales (Pearson, Roux-Dufort, y Clair, 2007).

En esta tesis doctoral relacionamos la velocidad organizativa con las crisis empresariales[1] *(organizational mishaps)* y con el desempeño medioambiental de la

[1] En el siguiente epígrafe, dedicado a la delimitación del objeto de estudio, acotamos el concepto de *organizational mishaps* y explicamos su traducción en español.

empresa. El estudio conjunto de estos temas, de indiscutible actualidad y relevancia como se ha puesto de manifiesto, ha sido muy limitado hasta la fecha. Es por tanto de suma importancia profundizar en estas relaciones ya que los resultados pueden tener importantes implicaciones en la actuación medioambiental de las empresas y la prevención de las crisis.

Las principales preguntas de investigación que intentamos resolver son las siguientes:

- ¿Por qué la velocidad organizativa puede influir en las crisis empresariales?

- ¿Qué mecanismos explican la relación entre velocidad y crisis empresariales?

- ¿Qué efecto tiene la velocidad organizativa en las crisis empresariales?

- ¿Cómo influye el dinamismo industrial sobre la relación entre velocidad organizativa y crisis empresariales?

- ¿Qué efecto tiene la velocidad organizativa en el desempeño medioambiental de la empresa?

### 1.1.2 Delimitación del Tema Objeto de Estudio

El objetivo de este trabajo de investigación es analizar la influencia de la velocidad organizativa en las crisis empresariales y en el desempeño medioambiental de la empresa. En este apartado delimitamos los principales conceptos sobre los que se articula esta tesis.

La **velocidad organizativa** se define como "la frecuencia (número) de actividades en una unidad de tiempo" (Bluedorn, 2002: 104). La velocidad se refleja en

distintos procesos organizativos. Por ejemplo, velocidad en la toma de decisiones (p. ej., Baum y Wally, 2003; Forbes, 2005; Perlow, Okhuysen, y Repenning, 2002), velocidad de innovación en los productos (p. ej., Atuahene-Gima, 2003; Kessler y Chakrabarti, 1996), velocidad en las tareas de post-integración tras fusiones (Homburg y Bucerius, 2006; Bauer & Matzler, 2014), velocidad del proceso de expansión internacional (Vermeulen y Barkema, 2002), o la velocidad de respuesta de la empresa (Slawinski y Bansal, 2012). Por tanto, la velocidad hace referencia a cómo de rápido se suceden los procesos estratégicos en las empresas (Forbes, 2005).

La velocidad organizativa ha sido considerada, en la mayor parte de los trabajos de investigación que han abordado su estudio, como un atributo positivo para que la empresa siga siendo competitiva (p. ej., D'Aveni, 1994; Vinton, 1992), y de carácter exógeno, es decir, determinada por el entorno en el que la empresa opera. Con base en estas dos premisas, trabajos previos se han centrado fundamentalmente en analizar la relación entre la velocidad en la toma de decisiones y el desempeño financiero (p. ej., Eisenhardt, 1989; Baum y Wally, 2003; Judge y Miller, 1991). Sin embargo, estudios más recientes han cuestionado estas premisas. Frente a la visión predominante de que la velocidad organizativa es un atributo positivo, algunos estudios han mostrado que la velocidad también puede implicar consecuencias adversas para la empresa (p. ej., Forbes, 2005; Perlow et al., 2002). Además, la necesidad de velocidad no sólo es exógena, sino que también puede emerger de forma endógena en función de la percepción que la empresa tenga de su entorno (Perlow et al., 2002).

La velocidad organizativa constituye el hilo conductor de los tres trabajos de investigación que integran esta tesis doctoral. En los tres trabajos estudiamos la velocidad organizativa a través de los procesos estratégicos de fusiones y adquisiciones

y alianzas estratégicas. Adicionalmente, en el primer trabajo incluimos también como medidas de velocidad la rotación de CEOs y de acciones comercializadas. Así pues, en este capítulo y en el último capítulo de conclusiones, cuando junto al término de velocidad organizativa no haya otra especificación adicional, el lector deberá identificar la velocidad con número de fusiones y adquisiciones y con número de alianzas estratégicas.

El segundo concepto sobre el que se articula esta tesis es el de ***organizational mishaps.*** La traducción del término *mishaps* al español resulta imprecisa y no recoge el significado con el que este término se utiliza en los artículos de investigación que presentamos. En un esfuerzo de utilizar un término en español, lo hemos traducido como **crisis en la empresa,** tal y como figura en el título de la tesis, y de forma análoga como **crisis empresariales**, como aparece en el desarrollo de esta introducción y en el capítulo de conclusiones. Las crisis empresariales *(organizational mishaps)* las definimos como sucesos o eventos provocados por la empresa que suponen una amenaza para su viabilidad (Pearson y Clair, 1998).

Estos sucesos provocados por la empresa han sido estudiados en la literatura como crisis organizativas *(organizational crises)* y como casos de ilegalidad corporativa *(corporate illegality)*. Los trabajos sobre crisis organizativas han abordado, primordialmente, el estudio de la gestión de las crisis. Algunos trabajos sobre ilegalidad corporativa han asumido intencionalidad por parte de la empresa. En este trabajo de tesis adoptamos el término *organizational mishaps*, – traducido al español como crisis empresariales – como término paraguas para soslayar las asunciones de estos estudios y englobar ambos tipos de sucesos ya que ambos pueden ser inducidos por la empresa.

En relación a la definición de crisis empresariales, es importante matizar varios aspectos. En primer lugar, se indica que las crisis son sucesos provocados. El hecho de que sean provocadas por la empresa no implica necesariamente que sean inducidos de forma intencional, ni que necesariamente estos sucesos constituyan el objeto de una ilegalidad.

En segundo lugar, puesto que las crisis son provocadas y la empresa juega un papel activo en la generación de estos sucesos, la crisis económica, y las situaciones de crisis causadas por huracanes, inundaciones, terremotos, volcanes, tsunamis, y otros fenómenos naturales quedan fuera del alcance de esta definición y no constituyen el objeto de estudio del presente trabajo de investigación.

En tercer lugar, en la definición se señala que las crisis suponen una amenaza para la viabilidad de la empresa. Acontecimientos como la venta de productos defectuosos que llegan a los consumidores pudiendo perjudicar su salud, ilícitos medioambientales o el abuso de los derechos de comunidades locales en las que la empresa opera, reflejan situaciones de crisis porque cuando estas situaciones son conocidas públicamente suelen llevar aparejadas boicots por parte de consumidores, bajada en el precio de las acciones, reputación negativa, y en casos extremos incluso pérdida de vida. Por tanto, estas situaciones suponen una amenaza para la viabilidad de la empresa y son ejemplos de crisis empresariales.

El tercer concepto sobre el que desarrollamos esta investigación es el de **desempeño medioambiental** que definimos como el impacto de los procesos y productos de la empresa en el medio ambiente (Azzone y Noci, 1996; Klassen y Shybark, 1999). Para medir este impacto se pueden utilizar distintas variables en base al sector de actividad (Azzone y Nocci, 1996). Algunas variables de desempeño

medioambiental son las emisiones de efecto invernadero y de lluvia ácida o el consumo de agua y energía.

### 1.1.3 Evolución de los Estudios sobre Crisis en la Empresa

Las crisis en la empresa *(organizational mishaps),* tal y como adelantábamos en la delimitación de este concepto, han sido estudiadas, fundamentalmente, como casos de crisis organizativas *(organizational crises)* o de ilegalidad corporativa *(corporate illegality).* Debido a las consecuencias negativas que para la empresa y la sociedad se derivan de situaciones como la retirada de productos (p. ej., Pearson y Clair, 1998) o la vulneración de leyes medioambientales (Mckendall y Wagner, 1997) y regulaciones laborales (Hill et al., 1992), estudios previos han estudiado cómo gestionar algunas de estas situaciones (p. ej., Antonacopoulou y Sheaffer, 2014; Lin et al., 2006; Pearson, 2010; Sheaffer y Mano-negrin, 2003; Shrivastava, 1993; Smart y Vertinsky, 1977), sus causas (p. ej., Greening y Johnson, 1996; Mitroff et al., 1989; Pearson y Mitroff, 1993; Turner 1976; Wicks, 2001) y, en menor medida, también sus consecuencias (p. ej., Kahn et al., 2013; Rerup, 2009).

Las principales causas de las crisis en la empresa *(organizational mishaps)* que han sido identificadas en la literatura se pueden agrupar en factores internos y externos. Entre los **factores internos** se incluyen las limitaciones cognitivas y aspectos psicoanalíticos (Pearson y Clair, 1998), la inadecuación de reglas y creencias compartidas colectivamente por la organización (Turner, 1976), las tecnologías de alto riesgo en conjunción con factores organizativos (Perrow, 1984), el tamaño de la empresa, el desempeño financiero, la disponibilidad de recursos, y por último, aspectos de gobierno corporativo (Daboud et al., 1995).

Las limitaciones cognitivas son inherentes al ser humano (Pearson y Clair, 1998). Estas restricciones cognitivas se reflejan por ejemplo en la capacidad limitada para procesar información, en las creencias preexistentes, o en los patrones mentales utilizados para dotar de sentido a la realidad. Por ejemplo, Halpern (1989) ilustró cómo creencias preexistentes pueden llevarnos a interpretar situaciones de tal forma que la interpretación concuerde con esas creencias y resultar, por tanto, en una interpretación errónea, consiguientes decisiones desacertadas y desencadenar una crisis organizativa. Weick (1988, 1989) estudió el papel de los patrones mentales como determinantes de las crisis. Entre los aspectos psicoanalíticos relacionados con la génesis de las crisis organizativas se han señalado el subconsciente (Schwartz, 1987) y la salud mental (Pauchant y Mitraff, 1992).

La imprecisión o inadecuación de las reglas y convicciones compartidas colectivamente en una organización también puede dar lugar a crisis en la empresa (Turner, 1976). Algunas de las causas de las crisis organizativas que reflejan esta inadecuación de las convicciones compartidas son las falsas burocracias y el abierto incumplimiento de las reglas de seguridad en el lugar de trabajo (Hynes y Prasad, 1977), la actitud de invulnerabilidad que impide percibir los riesgos de ciertas prácticas (Wicks, 2001), asunciones erróneas, la renuencia a temer que pueda ocurrir el peor resultado y una cultura empresarial rezagada en tomar precauciones formales para prevenir las crisis (Turner, 1976).

Para Perrow (1984) las crisis en la empresa tienen su origen y son inherentes a la naturaleza de las tecnologías de alto riesgo. Estas tecnologías implican un riesgo elevado porque son interactivamente complejas y están articuladas a través de mecanismos fuertemente interdependientes unos de otros (Perrow, 1984). La interacción

entre este tipo de tecnologías con los factores técnicos, de gestión, y estructurales de la organización pueden resultar en situaciones inesperadas e ininteligibles y derivar en una crisis organizativa. Esta causa ha sido utilizada para explicar la explosión del transbordador espacial Challenger (p. ej., Vaughan, 1990), o la fuga de gas tóxico de la planta de Union Carbide en Bhopal, India (p. ej., Pauchant y Mitroff, 1992).

Otro de los factores internos que ha sido relacionado con casos de crisis en la empresa es el tamaño de la organización (p. ej., Baucus y Near, 1991). La complejidad que entraña un mayor tamaño, la mayor probabilidad que tienen las empresas grandes de ser investigadas, o la descentralización en empresas de gran tamaño podrían favorecer que ocurran comportamientos ilícitos (Daboud et al., 1995).

Respecto a la rentabilidad de la empresa y las crisis, trabajos recientes han mostrado que el desempeño financiero puede incrementar las probabilidades de actuar de forma ilegal (Harris y Bromiley, 2007; Mishina et al., 2010). En cuanto a la disponibilidad de recursos, aunque ésta podría facilitar el comportamiento ilícito por parte de la empresa, no necesariamente ocurre de este modo (Sethi, 1994). Entre los aspectos de gobierno corporativo estudiados se encuentran los incentivos de compensación a los CEOs, encontrando una relación positiva entre las opciones sobre acciones como incentivo y la probabilidad de tergiversación de los resultados financieros (Harris y Bromiley, 1997).

Entre los **factores externos** que han sido relacionados con crisis en la empresa se encuentran la industria y las características del entorno (Daboud et al., 1995). La industria en la que la empresa opera puede determinar que la empresa sea más proclive a incurrir en comportamientos corruptos (p. ej., Baucus y Near, 1991; Hill et al., 1992; Mckendall y Wagner, 1997). Por ejemplo, en el estudio realizado por Baucus y Near

(1991) las empresas de las industrias de la alimentación, maderera, refinamiento de petróleo, transporte y equipamiento automovilístico mostraban mayor probabilidad de cometer actos ilegales tales como vulneración de los derechos de patentes, fraude de títulos valores, o fijación colusoria de precios.

En relación con las características del entorno, las crisis en la empresa se han relacionado con la munificencia y el dinamismo de la industria. Empresas en entornos en los que los recursos son escasos pueden ser más propensas a involucrarse en actividades ilegales (Staw y Szwajkowski, 1975). En estos entornos las empresas tienen mayores dificultades para obtener recursos y garantizar su viabilidad, de manera que ciertas prácticas ilegales pueden ser vistas como la alternativa para conseguir esos recursos (Staw y Szwajkowski, 1975). En sentido similar, empresas que operan en industrias con niveles bajos de rentabilidad son también más propensas a acometer ilegalidades ya que para estas empresas es más difícil alcanzar los objetivos de desempeño financiero y no disponen de muchos recursos para cumplir con la legislación (Mckendall y Wagner, 1997).

Además de con la escasez de recursos del entono, los entornos munificentes también se han asociado con crisis en la empresa (Baucus y Near, 1991). La razón estriba en que en estos entornos, en los que hay abundantes recursos, prácticas ilegales pueden ser consideradas como un medio para obtener recursos adicionales en un intento de mejorar la posición de la empresa o como un resultado involuntario de los esfuerzos de los gerentes por situar a la empresa en una posición más ventajosa (Baucus y Near, 1991). Por último, la elevada dinamicidad del entorno también puede influir en la ilegalidad corporativa (Baucus y Near, 1991).

### 1.1.4 Evolución de los Estudios sobre Empresa y Medio Ambiente

El campo de investigación sobre empresa y medio ambiente es relativamente nuevo. Ha surgido como respuesta al creciente reclamo a las empresas, durante los últimos 40 años, para que reduzcan la contaminación y eviten daños medioambientales (Hoffman y Georg, 2013).

Los primeros estudios sobre empresa y medio ambiente tienen sus inicios a principios de los años 70. Estos primeros trabajos se enmarcaban en el campo de la responsabilidad social corporativa (p. ej., Carroll, 1979; Sethi, 1979). No fue hasta principios de los años 90, coincidiendo con la consideración de las cuestiones medioambientales como un asunto estratégico (Hoffman y Bansal, 2012), cuando se empezó a desarrollar un sustancioso cuerpo de literatura en torno a esta temática. En el año 1995 se publicó en la revista *Academy of Management Review* un número monográfico sobre medio ambiente titulado *"Ecologically Sustainable Organizations."* Posteriormente, en el año 2000, la revista *Academy of Management Journal* publicó el monográfico *"Management of Organizations in the Natural Environment."* Estos trabajos, y subsiguientes desarrollos teóricos y empíricos, han ido configurando la investigación sobre empresa y medio ambiente como un campo de investigación con identidad propia.

Inicialmente, y de acuerdo a la lógica económica, se consideró que las inversiones destinadas a no dañar el medio ambiente perjudicaban la competitividad de la empresa. Beneficio económico y cuidado del medio ambiente se mostraban como realidades empresariales irreconciliables. Sin embargo, Porter (1991) cuestionó este paradigma y planteó que atender las cuestiones medioambientales podía ser fuente de ventaja competitiva, si las regulaciones medioambientales eran lo suficientemente

estrictas. En la misma línea, Porter y Van Der Linde (1995) argumentaron que los estándares medioambientales podían contribuir a la mejora de la innovación, y a proporcionar a la empresa una ventaja respecto a empresas de otros países en los que no existiera una regulación medioambiental similar.

Estos trabajos fueron el punto de arranque para considerar el cuidado del medio ambiente desde el punto de vista de la estrategia de la empresa. A partir de estos trabajos, las relaciones entre empresa y medio ambiente han sido estudiadas a la luz de distintos enfoques teóricos. Los enfoques más consolidados han sido la teoría de recursos y capacidades, la teoría institucional, y la teoría de los *stakeholders*.

La teoría de recursos y capacidades se centra en el papel de los recursos que posee la empresa y en sus capacidades como fuente de ventaja competitiva. Los recursos pueden ser tangibles, por ejemplo financieros o tecnológicos, y también intangibles como la reputación, la cultura organizativa, o el *know-how* (Grant, 1991). Las capacidades son las habilidades de la empresa que le permiten gestionar los recursos (Barney, 1995). El potencial de los recursos y capacidades para ser fuente de ventaja competitiva sostenible viene determinado por su escasez, unicidad, durabilidad, y su carácter insustituible e inimitable (Barney, 1995; Dierickx y Cool, 1989; Peteraf, 1993).

Hart (1995) integró el medio ambiente en esta teoría y desarrolló la teoría de recursos y capacidades medioambientales. Hart (1995) argumentó que las capacidades de la empresa para desarrollar iniciativas medioambientales podían ser fuente de ventaja competitiva. En concreto, plateó que la prevención de la contaminación, la garantía del producto y el desarrollo sostenible son estrategias medioambientales que pueden ser fuente de ventaja competitiva para la empresa.

A partir de Hart (1995), el enfoque de recursos y capacidades ha sido utilizado para estudiar la estrategia medioambiental de la empresa (p. ej., Aragón-Correa y Sharma, 2003; Russo y Fouts, 1997; Shrivastava, 1995), la capacidad de integración de los *stakeholers* como fuente de ventaja competitiva (Sharma y Vredenburg, 1998), o la gestión medioambiental proactiva como una capacidad dinámica valiosa (Aragón-Correa y Sharma, 2003). Otros estudios han investigado también cómo la incertidumbre, la complejidad y la munificencia del entorno pueden influir en el desarrollo de la estrategia medioambiental de la empresa y en el desarrollo de capacidades valiosas (p. ej., Aragón-Correa y Sharma, 2003; Sharma y Vredenburg, 1998). Estos estudios han permitido explicar por qué empresas con similares recursos adoptan diferentes estrategias medioambientales u obtienen diferentes resultados económicos adoptando estrategias medioambientales similares (Hoffman y Georg, 2013).

Frente a la teoría de recursos y capacidades que pone su atención en el interior de la empresa, la teoría institucional se centra en el contexto social en el que la empresa opera (Bansal, 2005). El comportamiento de la empresa tiene que ser considerado como legítimo por los actores sociales que tienen poder en el contexto social (Hoffman y Georg, 2013). Por tanto, desde este enfoque, la estrategia medioambiental de la empresa viene determinada por el contexto (Hoffman, 1999; Jennings y Zandbergen, 1995). Diversos trabajos han analizado cómo las presiones legislativas, normativas y las presiones cognitivas influyen en el comportamiento medioambiental de las empresas (Hoffman y Georg, 2013).

A nivel legislativo, se ha analizado el papel de la regulación medioambiental en aspectos como la adopción de sistemas de gestión medioambiental (p. ej., Henriques y

Sadorsky, 1996; Majumdar y Marcus, 2001) y de estrategias medioambientales (p. ej., Aragón-Correa, 1998), y cómo el conocimiento tecnológico puede moderar la relación entre la implementación de una nueva legislación medioambiental y los resultados de la empresa (Canon-de-Francia, Garces-Ayerbe, y Ramírez-Alesón, 2007). A nivel normativo, se ha prestado especial atención a las asociaciones y las certificaciones tales como ISO 14001 (p. ej., Delmas y Montiel, 2008; King y Lenox, 2000; Montiel, Husted, y Christmann, 2012, Bansal y Roth, 2000). Las presiones cognitivas sobre temas medioambientales han recibido menos atención por parte de la literatura (Hoffman y Georg, 2013). Se ha estudiado por ejemplo, cómo estas presiones influyen en la relación entre estructuras de gobierno corporativo y sostenibilidad medioambiental (Ortiz-de-Mandojana, Aguilera-Caracuel, y Morales-Raya, forthcoming).

Por último, la teoría de los *stakeholders* concibe a la empresa en relación con grupos que pueden tener un interés legítimo en la misma (Hoffman y Georg, 2013). Esta teoría tiene su origen en el trabajo de Freeman (1984) que definió a los *stakeholders* como "cualquier persona o grupo de personas que puede afectar al desempeño de la empresa o verse afectado por el logro de los objetivos de la organización" (1984: 46). Los *stakeholders* se han clasificado en internos y externos (Clarkson, 1995) y también en función de su poder, legitimidad y de la urgencia de sus demandas (Mitchell, Agle, y Wood, 1997). Diversos trabajos han estudiado la influencia de los distintos *stakeholders* en el comportamiento de la empresa respecto al medio ambiente (p. ej., Buysse y Verbeke, 2003; Delmas, 2001; Hart y Sharma, 2004; Sharma y Henriques, 2005) así como su influencia en el desempeño medioambiental (p. ej., Kassinis y Vafeas, 2002).

Además de estos enfoques teóricos, que han sido ampliamente desarrollados en la literatura, trabajos recientes han adoptado un enfoque novedoso incorporando el tiempo *(time)* y la perspectiva temporal de las organizaciones *(temporal perspective)* como eje fundamental para explicar las relaciones entre empresa y medio ambiente (p. ej., Bansal y DesJardine, 2014; Das, 2006; Ortiz-de-Mandojana, 2011; Slawinski y Bansal, 2012). La perspectiva temporal concibe las decisiones medioambientales de la empresa como decisiones intertemporales, es decir, son decisiones que implican un coste en el presente para obtener una recompensa en el futuro (p. ej., Slawinski y Bansal, 2012; Ortiz-de-Mandojana, 2011). Esta perspectiva ha sido utilizada para explicar el desempeño medioambiental de la empresa (Ortiz-de-Mandojana, 2011) y, junto con otras dimensiones de tiempo como la velocidad, también para explicar el tipo de respuestas de las empresas frente al cambio climático (Slawinski y Bansal, 2012). Además, para Bansal y DesJardine (2014) la noción de tiempo es la clave para distinguir entre responsabilidad social corporativa y sostenibilidad.

### 1.1.5 Interés de la Investigación

Esta tesis doctoral presenta una compilación de tres trabajos de investigación en los que se relaciona la velocidad organizativa con las crisis empresariales y con el desempeño medioambiental de la empresa. El interés científico de esta tesis radica en la relevancia y actualidad del tema objeto de estudio, en su carácter novedoso, en los desarrollos teóricos, en la variedad de datos, en la riqueza metodológica aplicada, en la adaptación del lenguaje científico a la audiencia a la que nos dirigimos, y en la formalidad en la presentación de la información. Detallamos, a continuación, cada una de estos atributos.

***Relevancia y actualidad del tema objeto de estudio*.** El énfasis en la velocidad organizativa, la Conferencia "París 2015" sobre cambio climático y los ejemplos de recientes crisis corporativas que mencionábamos en la introducción evidencian la actualidad y la relevancia del tema objeto de estudio. En este sentido, nuestro trabajo resulta tempestivo para responder a interrogantes actuales que requieren de una mayor comprensión por parte de la comunidad científica y de la sociedad en su conjunto.

***Carácter novedoso del estudio*.** El estudio del efecto de la velocidad organizativa en resultados de la empresa distintos al desempeño financiero ha recibido escasa atención en la literatura (p. ej., Bansal, 2003; Slawinski y Bansal, 2012; Perlow et al., 2002; Vermeulen y Barkema, 2002). Aunque escasos, estos estudios ponen de manifiesto el potencial de la velocidad para influir en los resultados organizativos. Nuestro trabajo contribuye a consolidar y a extender de forma significativa estos estudios previos.

***Desarrollo teórico*.** En las argumentaciones desarrolladas en los tres trabajos de investigación hemos utilizado los enfoques teóricos que consideramos tienen un mayor poder explicativo en las relaciones planteadas.

En el primer trabajo, presentado en al capítulo 2, exploramos la relación entre la velocidad organizativa y las crisis empresariales. Este trabajo está orientado a quienes se dedican a la práctica de la gestión empresarial. Con la finalidad de hacer comprensible nuestro trabajo para estos profesionales, nos apoyamos en varios aspectos teóricos sobre los que articulamos los mecanismos que pueden explicar por qué una mayor velocidad organizativa podría derivar en crisis empresariales. Estos mecanismos se sustentan en las limitaciones cognitivas de atención de los gerentes, en la miopía temporal *(temporal myopia)* (Miller, 2002) y en el aprendizaje organizativo.

En el segundo trabajo, recogido en el capítulo 3, nos apoyamos en la perspectiva de la cognición gerencial *(managerial cognitive perspective)*. Esta perspectiva toma como punto de partida las limitaciones cognitivas, inherentes al ser humano. Estudios previos han mostrado las implicaciones de estas limitaciones cognitivas como antecedentes de las crisis empresariales (p. ej., Chatterjee y Hambrick, 2007; Halpern, 1989; Mishina et al., 2010; Turner, 1976; Weick, 1988, 1989; Weitzel y Jonsson 1989). Apoyándonos en esta teoría de la cognición gerencial, extendemos estos estudios previos argumentando que la velocidad puede desbordar las capacidad de los gerentes para procesar información (Simon, 1976; Miller, 1956). Esta situación puede propiciar el uso de heurísticas[2] *(heuristics)* (March y Simon, 1993) y sesgos *(biases)* y potencialmente derivar en crisis empresariales.

En el tercer trabajo, desarrollado en el capítulo 4, en el que planteamos que la relación entre la velocidad y el desempeño medioambiental de la empresa es curvilínea, nuestro desarrollo teórico está construido en torno al concepto de miopía temporal (Miller, 2002). Argumentamos que niveles moderados de velocidad pueden contribuir a la mejora del desempeño medioambiental. Sin embargo, cuando la velocidad organizativa es excesiva los gerentes pueden verse afectados por la miopía temporal, es decir, centrarse demasiado en el presente y ser por tanto incapaces de evaluar las consecuencias futuras de sus acciones. Como consecuencia, decisiones medioambientales cuya repercusión recae en el largo plazo podrían verse relegadas y el desempeño medioambiental de la empresa podría empeorar.

[2] Con el término heurísticas nos referimos a mecanismos, reglas simplificadas, que sirven de ayuda a los gerentes para procesar información y tomar decisiones de forma más rápida (Bazerman, 2006; Schwenk, 1996). Un ejemplo de heurística consiste en no considerar detenidamente todas las alternativas en la toma de decisiones (Benson y Beach, 1996).

***Variedad de bases de datos.*** Para verificar de forma empírica las relaciones planteadas en esta tesis doctoral hemos realizado un importante esfuerzo en la compilación de datos sobre crisis empresariales, velocidad organizativa, desempeño medioambiental de la empresa, y demás variables utilizadas como control.

Con la finalidad de cuantificar el número de crisis empresariales de las empresas Coca-Cola y PepsiCo, que configuran el estudio de caso del primer artículo, nos basamos en las noticias en las que se nombraba a estas empresas en el periódico *The Wall Street Journal* (WSJ) durante el período 2000-2010. Para realizar esta búsqueda utilizamos la base de datos *Factiva*. Ésta es una base de datos de referencia en prensa y actualidad económica que permite acceder al texto completo de noticias publicadas en multitud de diarios estatales e internacionales, entre los que se encuentra WSJ. Adicionalmente, utilizamos la base de datos *KLD Research & Analytics, Inc.* (KLD) para contrastar nuestra medida de crisis y dotarla así de mayor robustez. KLD evalúa el desempeño social de alrededor de 3100 empresas en siete áreas principales: comunidad, diversidad, relaciones con los empleados, medio ambiente, derechos humanos, productos y gobierno corporativo. En cada una de estas áreas se incluye un conjunto de ítems que representan fortalezas *(KLD strengths)* y un conjunto de ítems que representan debilidades (*KLD concerns).* El número de crisis de cada una de las empresas obtenido a través de WSJ mostraba consistencia con el número de *KLD concerns* (coherente con nuestra definición de crisis empresariales) de cada una de las empresas. En el segundo artículo, que es de carácter cuantitativo, nos centramos exclusivamente en la base de datos KLD para construir la variable de crisis empresariales.

La información sobre las variables de velocidad organizativa está extraída de diversas fuentes. En los tres trabajos que integran esta tesis utilizamos el número de fusiones y adquisiciones y de alianzas estratégicas como variables de velocidad. Esta información procede de la base de datos *Thomson Financial's SDC Platinum* (SDC). SDC está considerada como la base de datos más completa sobre fusiones, adquisiciones y alianzas, y ha sido reiteradamente utilizada en la literatura (p. ej., Annad y Khanna, 2000; Li et al., 2012; Sampson, 2005; Tong y Li, 2011). En el primer artículo, además de estas variables, incluimos la rotación de CEOs y de acciones comercializadas como indicadores de velocidad. La información sobre la rotación de CEOs la hemos obtenido de la base de datos *Compustat Executive Compensation*. Los datos sobre la rotación de acciones comercializadas provienen de la base de datos *Datastream*.

La información sobre el desempeño medioambiental de las empresas la hemos obtenido de *Newsweek Green Rankings* publicado en 2009. Este ranking proporciona información sobre el desempeño medioambiental de las 500 empresas americanas de mayor tamaño. En concreto, utilizamos la puntuación de impacto ambiental *Environmental Impact Score* (EIS) que es una medida que condensa el impacto medioambiental de la empresa a partir de 700 medidas entre las que se incluyen las emisiones de efecto invernadero, el uso de agua, la eliminación de residuos sólidos y las emisiones de lluvia ácida.

En los análisis estadísticos realizados en el segundo y tercer artículos utilizamos varias variables de control. La información relativa al desempeño financiero de la empresa, el tamaño (medido como número de empleados), la intensidad de capital, y el sector industrial se ha obtenido de la base de datos *Compustat North America*. La

información sobre la edad de la empresa, partiendo del año de incorporación, procede de la base de datos *Mergent Online.*

Adicionalmente, para la elaboración del primero de los trabajos, hemos consultado informes sobre datos generales de las empresas (p. ej., año de fundación de las empresas Coca-Cola y PepsiCo) y sobre la industria. Hemos accedido a estos informes a través de la base de datos *Standard & Poor's NetAdvantage*.

***Riqueza metodológica*.** Esta tesis incluye un artículo cualitativo y dos cuantitativos. La aplicación de metodología cualitativa en el primer artículo nos ha permitido estudiar con detalle el caso de dos empresas y ahondar en los nexos que pueden relacionar la velocidad con las crisis empresariales. El segundo artículo, en el que también estudiamos la relación velocidad-crisis, es de carácter cuantitativo lo que nos ha permitido testar la hipótesis planteada en el estudio cualitativo y además explorar el efecto moderador del dinamismo industrial.

Para el análisis de noticias realizado en el primer trabajo hemos utilizado el software de análisis cualitativo ATLAS.TI. Los análisis cuantitativos de regresión lineal múltiple con efectos moderadores y de regresión cuadrática han sido ejecutados con el paquete estadístico STATA 13.1.

***Adaptación del lenguaje científico a la audiencia que nos dirigimos*.** El primer trabajo de esta tesis está especialmente dirigido a los profesionales de la gestión empresarial. Las argumentaciones teóricas, los resultados, así como las implicaciones prácticas están expresados en un lenguaje adaptado a esta audiencia. El segundo y tercer trabajos, aunque también presentan importantes implicaciones para los gerentes, están dirigidos a una audiencia académica, por tanto, el lenguaje así como los planteamientos teóricos y empíricos están en consonancia con esta audiencia.

***Formalidad en la presentación de la información*.** Las citas contenidas a lo largo del texto, así como la presentación de los resultados a través de tablas y figuras están elaboradas siguiendo las orientaciones de estilo de la revista académica *Academy of Management Journal.*

## 1.2 Objetivos de la Investigación

Esta tesis doctoral está articulada en torno a la velocidad organizativa que es el hilo conductor entre los tres trabajos de investigación que presentamos. El objetivo general de la tesis consiste en analizar el efecto de la velocidad organizativa en los resultados de la empresa, concretamente en las crisis empresariales y en el desempeño medioambiental. A su vez, cada uno de los tres trabajos que integran la tesis conserva su propia individualidad y tiene unos objetivos de investigación específicos que describimos a continuación.

En el primer trabajo, presentado en el segundo capítulo, el objetivo de la investigación es responder a la pregunta de por qué la velocidad organizativa podría conducir a las empresas a experimentar crisis. El segundo objetivo consiste, por tanto, en identificar y describir cuáles son los mecanismos que podrían explicar la relación velocidad-crisis. Por último, el tercer objetivo radica en articular el desarrollo teórico y las implicaciones prácticas del trabajo en un lenguaje comprensible y adaptado a quienes se dedican a la práctica de la gestión empresarial; audiencia a la que nos dirigimos de forma particular con este trabajo.

En el segundo trabajo, presentado en el tercer capítulo, el objetivo es verificar de forma cuantitativa si la velocidad organizativa es una potencial causa de las crisis empresariales, es decir, si la relación entre la velocidad y las crisis es positiva y

estadísticamente significativa. El segundo objetivo que abordamos consiste en estudiar el papel moderador del dinamismo. En concreto, nos planteamos si el dinamismo industrial podría intensificar la relación entre la velocidad organizativa y las crisis empresariales.

En el tercer trabajo, presentado en el capítulo cuarto, el objetivo principal es determinar si la velocidad organizativa es un determinante del desempeño medioambiental de la empresa. En concreto planteamos si podría ser un determinante tanto de la mejora del desempeño medioambiental como de su deterioro. Los siguientes objetivos por tanto consisten en verificar si efectivamente se trata de una relación cuadrática con forma de U invertida y en sustentar de forma teórica nuestros argumentos.

## 1.3 Estructura del Trabajo de Investigación

Esta tesis doctoral consta de cinco capítulos. En los tres capítulos siguientes a esta introducción se presentan los tres trabajos de investigación. El capítulo final está dedicado a conclusiones y recapitulación. A continuación, describimos brevemente el contenido de cada uno de estos capítulos.

El capítulo 2 presenta el trabajo titulado ***"Racing to the Bottom: The Negative Consequences of Organizational Speed."*** En este trabajo estudiamos la relación entre la velocidad organizativa y las crisis empresariales. Aunque la literatura académica y de gestión tradicionalmente ha destacado la importancia de la velocidad organizativa para que las empresas sean competitivas (p. ej., D'Aveni, 1994; Vinton, 1992) estudios más recientes han mostrado que la velocidad puede también conllevar efectos adversos para las empresas (p. ej., Perlow et al., 2002; Slawinski y Bansal, 2012; Vermeulen y

Barkema, 2002). Sobre la base de estos últimos trabajos, argumentamos que mayor velocidad organizativa puede conducir a más crisis empresariales.

Para explorar esta relación estudiamos el caso de dos empresas, Coca-Cola y PepsiCo, durante un período de once años, desde 2000 a 2010. Para este período de tiempo analizamos indicadores de velocidad (número de fusiones y adquisiciones, número de alianzas estratégicas, rotación de CEOs, y rotación de acciones comercializadas) y las crisis que han experimentado cada una de las empresas. A partir de esta información proponemos de forma inductiva tres mecanismos que pueden explicar por qué mayor velocidad puede derivar en más crisis. La principal contribución de este trabajo es plantear la relación entre velocidad y crisis empresariales y en desvelar los posibles mecanismos subyacentes en esta relación.

El capítulo 3 recoge el artículo titulado ***"The Influence of Organizational Speed on Organizational Mishaps: The Moderating Role of Industry Dynamism."*** En este trabajo, concebido como una extensión cuantitativa del primero, analizamos el efecto de la velocidad organizativa en las crisis empresariales y el efecto moderador del dinamismo de la industria. Estudios previos han mostrado la relación entre las limitaciones cognitivas y sesgos psicológicos, y las crisis empresariales (p. ej., Chatterjee y Hambrick, 2007; Halpern, 1989; Mishina et al., 2010; Turner, 1976; Weick, 1988, 1989; Weitzel y Jonsson 1989). En este trabajo argumentamos que la velocidad organizativa deriva en ingentes cantidades de información y presión *(time pressure)*. Debido a la habilidad limitada para procesar información (Simon, 1976; Miller, 1956), los gerentes de las empresas utilizan heurísticas para economizar tiempo y procesar esa cantidad de información de forma más rápida (March y Simon, 1993). El uso de heurísticas ahorra tiempo, pero también puede dar lugar a sesgos y

potencialmente derivar en crisis empresariales. Adicionalmente, argumentamos que en entornos dinámicos la relación positiva entre velocidad organizativa y crisis podría ser más intensa. Para verificar nuestras hipótesis realizamos un análisis de regresión múltiple con efectos moderadores utilizando una muestra de 331 empresas incluidas en S&P 500 y un panel de datos de siete años, desde 2003 a 2009.

La principal contribución de este artículo radica en identificar la velocidad organizativa como una de las causas potenciales de las crisis empresariales. Algunos estudios han mencionado aspectos de velocidad en relación con las crisis (p. ej., Greening y Johnson, 1996). Sin embargo, la noción de velocidad organizativa y sus implicaciones en conexión con las crisis empresariales no ha sido articulada en estudios previos. Otra contribución relevante de este trabajo es identificar uno de los factores contingentes, el dinamismo industrial, que puede intensificar esta relación.

El capítulo 4 presenta el artículo titulado ***"The Influence of Organizational Speed on Corporate Environmental Performance."*** En este trabajo analizamos la relación entre la velocidad organizativa y el desempeño medioambiental de la empresa. La literatura sobre las consecuencias de la velocidad organizativa en los resultados de la empresa ha estado polarizada en estudios que señalan efectos positivos (p. ej., Atuahene-Gima, 2003; Baum y Wally, 2003; D'Aveni, 1994; Vinton, 1992) y en estudios que han mostrado efectos perniciosos (Perlow et al., 2002; Slawinski y Bansal, 2012; Vermeulen y Barkema, 2002). En este artículo argumentamos que la velocidad, medida a través del número de fusiones y adquisiciones y alianzas estratégicas, puede tener tanto un efecto positivo como un efecto negativo en el desempeño medioambiental de la empresa. Este efecto va a depender del nivel de velocidad. En concreto proponemos una relación cuadrática en forma de U invertida. Niveles moderados de

velocidad pueden influir positivamente en la mejora del desempeño medioambiental, sin embargo demasiada velocidad puede llevar a su deterioro. Para testar nuestra hipótesis realizamos un análisis de regresión múltiple utilizando una muestra de 427 empresas de Estados Unidos de gran tamaño incluidas en *Newsweek Green Rankings* 2009.

La contribución de este artículo radica en identificar que la velocidad organizativa puede ser uno de los determinantes a nivel corporativo del desempeño medioambiental de la empresa. Los estudios previos que han mostrado los efectos negativos de la velocidad habían apuntado, sólo de forma implícita, a una relación cuadrática (p. ej., Vermeulen y Barkema, 2002). Sin embargo, no se ha mostrado evidencia empírica. Por tanto, otra importante contribución de este trabajo es verificar empíricamente que la relación entre la velocidad organizativa y el desempeño medioambiental es curvilínea, y más compleja que la que predice una función lineal.

Finalmente, en el capítulo 5 se exponen las principales conclusiones obtenidas en los trabajos de esta tesis, las implicaciones académicas y para la gestión, las limitaciones encontradas en el desarrollo del trabajo, y se plantean futuras líneas de investigación.

## 1.4 Bibliografía Utilizada en el Capítulo

Anand, B. N., y Khanna, T. 2000. Do firms learn to create value? The case of alliances. ***Strategic Management Journal,*** 21: 295–315.

Antonacopoulou, E. P., y Sheaffer, Z. 2014. Learning in crisis: Rethinking the relationship between organizational learning and crisis management. ***Journal of Management Inquiry,*** 23: 5–21.

Aragón-Correa, J. A. 1998. Strategic proactivity and firm approach to the natural environment. ***Academy of Management Journal,*** 41: 556–567

Aragón-Correa, J. A., y Sharma, S. 2003. A contingent resource-based view of proactive corporate environmental strategy. ***Academy of Management Review,*** 28: 71–88.

Atuahene-Gima, K. 2003. The effects of centrifugal and centripetal forces on product development speed and quality: How does problem solving matter? ***Academy of Management Journal,*** 46: 359–373.

Azzone, G., y Noci, G. 1996. Measuring the environmental performance of new products: An integrated approach. ***International Journal of Production Research,*** 34: 3055–3078.

Bansal, P. 2003. From issues to actions: The importance of individual concerns and organizational values in responding to natural environmental issues. ***Organization Science,*** 14: 510–527.

Bansal, P. 2005. Evolving sustainably: A longitudinal study of corporate sustainable development. ***Strategic Management Journal,*** 26: 197–218.

Bansal, P., y DesJardine, M. 2014. Business Sustainability: It is about time. ***Strategic Organization,*** 12: 70–78.

Bansal, P., y Roth, K. 2000. Why companies go green: A model of ecological responsiveness. ***Academy of Management Journal,*** 43: 717–736.

Barkema, H. G., Baum J. A., y Mannix, E. A. 2002. Management challenges in a new time. ***Academy of Management Journal,*** 45: 916–930.

Barney, J. B. 1995. Looking inside for competitive advantage. ***Academy of Management Executive,*** 9: 49–61.

Baucus, M. S., y Near, J. P. 1991. Can illegal corporate behavior be predicted? An event history analysis. ***Academy of Management Journal,*** 34: 9–36.

Bauer, F., y Matzler, K. 2014. Strategic complementarity, cultural fit, and degree and speed of integration. ***Strategic Management Journal,*** 35: 269–291.

Baum, J. R., y Wally, S. 2003. Strategic decision speed and firm performance**. *Strategic Management Journal,*** 24: 1107–1129.

Bazerman, M. H. 2006. ***Judgement in Managerial Decision Making***. New York: Wiley.

Benson, L., y Beach, L. R. 1996. The effects of time constraints on the pre-choice screening of the decision options. ***Organizational Behavior and Human Decision Processes,*** 67: 222–228.

Bluedorn, A. C. 2002. ***The Human Organization of Time.*** Stanford: Stanford University Press.

Buysse, K., y Verbeke, A. 2003. Proactive environmental strategies: A stakeholder management perspective. ***Strategic Management Journal,*** 24: 453–470.

Canon-de-Francia, J., Garces-Ayerbe, C., y Ramírez-Alesón, M. 2007. Are more innovative firms less vulnerable to new environmental regulation? ***Environmental & Resource Economics,*** 36:295–311.

Carroll, A. 1979. A three-dimensional conceptual model of corporate performance. ***Academy of Management Review,*** 4: 497–505.

Chatterjee, A., y Hambrick, D. C. 2007. It's all about me: Narcissistic chief executive officers and their effects on company strategy and performance. ***Administrative Science Quarterly,*** 52: 351–386.

Clarkson, M. B. E. 1995. A stakeholder framework for analyzing and evaluating corporate social performance. ***Academy of Management Review,*** 20: 92–117.

D'Aveni, R. 1994. ***Hypercompetition: Managing the dynamics of strategic maneuvering.*** New York: The Free Press.

Daboub, A. J., Rasheed, A. M. A., Priem, R. L., y Gray, D. A. 1995. Top management Team characteristics and corporate illegal activity. ***Academy of Management Review,*** 20:138–170.

Das, T. K. 2006. Strategic alliance temporalities and partner opportunism. ***British Journal of Management,*** 17: 1–21.

Delmas, M. 2001. Stakeholders and competitive advantage: The case of ISO 14001. ***Production and Operations Management,*** 10: 343–358.

Delmas, M., y Montiel, I. 2008. The diffusion of voluntary international management standards: Responsible care, ISO 9000 and ISO 14001 in the chemical industry. ***Policy Studies Journal,*** 36: 65–93

Dierickx, I., Cool, K. 1989. Asset stock accumulation and sustainability of competitive advantage. ***Management Science,*** 35: 1504–1514.

Eisenhardt, K. M. 1989. Building theories from case study research. ***Academy of Management Review,*** 14: 532–550.

Forbes, D. P. 2005. Managerial determinants of decision speed in new ventures. ***Strategic Management Journal,*** 26: 355–366.

Freeman, R. E. 1984. ***Strategic Management: A Stakeholder Approach.*** Boston: Pitman/Ballinger.

Grant, R. M. 1991. The resource-based theory of competitive advantage: Implications for strategy formulation. ***California Management Review,*** 33: 114–135.

Greening, D. W., y Johnson, R. A. 1996. Do managers and strategies matter? A study in crisis. ***Journal of Management Studies,*** 33: 25–51.

Halpern, J. J. 1989. Cognitive factors influencing decision making in a highly reliable organization. ***Organization & Environment,*** 3: 143–158.

Harris, J., y Bromiley, P. 2007. Incentives to cheat: The influence of executive compensation and firm performance on financial misrepresentation. ***Organization Science,*** 18: 350–367.

Hart, S. L. 1995. A natural-resource-based view of the firm. ***Academy of Management Review,*** 20: 986–1014.

Hart, S. L., y Sharma, S. 2004. Engaging fringe stakeholder for competitive imagination. ***Academy of Management Executive,*** 18: 7–18.

Henriques, I., y Sadorsky, P. 1996. The determinants of an environmentally responsive firm: An empirical approach. ***Journal of Environmental Economics and Management,*** 30: 381–395.

Hill, C. W. L., Kelley, P. C., Agle, B. R., Hitt, M. A., y Hoskisson, R. E. 1992. An empirical examination of the causes of corporate wrongdoing in the United States. ***Human Relations,*** 45: 1055–1076.

Hoffman, A. 1999. Institutional evolution and change: environmentalism and the U.S. chemical industry. ***Academy of Management Journal,*** 42: 351–372.

Hoffman, A. J., y Bansal, P. 2012. ***Retrospective, Perspective, and Prospective: Introduction to the Oxford Handbook on Business and the Natural Environment.*** In Bansal, P. y Hoffman, A. J. (Eds.), The Oxford Handbook of Business and the Natural Environment (1st ed.). Oxford: Oxford University Press.

Hoffman, A., y Georg, S. 2013. ***Introduction to Business and the Natural Environment. A History of Research on Business and the Natural Environment: Conversations from the Field.*** In Georg, S. y Hoffman, A. (Eds.), Business and the Environment: Critical Perspectives in Business and Management, Volume 1. Oxford, UK: Routledge.

Homburg, C., y Bucerius, M. 2006. Is speed of integration really a success factor of mergers and acquisitions? An analysis of the role of internal and external relatedness. ***Strategic Management Journal,*** 27: 347–367.

Hynes, T., y Prasad, P. 1997. Patterns of "mock bureaucracy" in minting disasters: An analysis of the Westray coal mine explosion. ***Journal of Management Studies,*** 34: 601–623.

Jennings, P. D., y Zandbergen, P. A. 1995. Ecologically sustainable organizations: An institutional approach. ***Academy of Management Review,*** 20: 1015–1052.

Judge, W. Q., y Miller, A. 1991. Antecedents and outcomes of decision speed in different environmental. ***Academy of Management Journal,*** 34: 449–463.

Kahn, W. A., Barton, M. A., y Fellows, S. 2013. Organizational crises and the disturbance of relational systems. ***Academy of Management Review,*** 38: 377–396.

Kassinis, G., y Vafeas, N. 2002. Corporate boards and outside stakeholders as determinants of environmental litigation. ***Strategic Management Journal,*** 23: 399–415.

Kessler, E. H., y Chakrabarti, A. K. 1996. Innovation speed: A conceptual model of context, antecedents, and outcomes. ***Academy of Management Review,*** 21: 1143–1191.

King, A. A., y Lenox, M. J. 2000. Industry self-regulation without sanctions: The chemical industry's responsible care program. ***Academy of Management Journal,*** 44: 698–716.

Klassen, R. D., y Whybark, D. C. 1999. The impact of environmental technologies on manufacturing performance. ***Academy of Management Journal,*** 42: 599–615.

Li, D., Eden, L., Hitt, M. A., Ireland, R. D., y Garrett, R. P. 2012. Governance in Multilateral R&D Alliances. ***Organization Science,*** 23: 1191–1210.

Lin, Z., Zhao, X., Ismail, K. M., y Carley, K. M. 2006. Organizational design and restructuring in response to crises: Lessons from computational modeling and real-world cases. ***Organization Science,*** 17: 598–675.

Majumdar, S. K., y Marcus, A. A. 2001. Rules versus discretion: The productivity consequences of flexible regulation. ***Academy of Management Journal,*** 44: 170–179.

March, H., y Simon, H. 1993. ***Organizations*** (2nd ed.). Cambridge: Blackwell Publishers.

McKendall, M. A., y Wagner, J. A. 1997. Motive, opportunity, choice, and corporate illegality. ***Organization Science,*** 8: 624–647.

Miller, G. A. 1956. The magic number seven plus or minus two: Some limits on our capacity for processing information. ***Psychological Review,*** 64: 81–97.

Miller, K. D. 2002. Knowledge inventories and managerial myopia. ***Strategic Management Journal,*** 23: 689–706.

Mishina, Y., Dykes, B. J., Block, E. S., y Pollock, T. G. 2010. Why "good" firms do bad things: the effects of high aspirations, high expectations, and prominence on the incidence of corporate illegality. ***Academy of Management Journal,*** 53: 701–722.

Mitchell, R., Agle, B., y Wood, D. 1997. Toward a theory of stakeholder identifi cation and salience: Defi ning the principle of who and what really counts. ***Academy of Management Review,*** 22: 853– 886.

Mitroff, I, I., Pauchant, T., Finney, M., y Pearson, C. 1989. Do (some) organizations cause their own crises? The cultural profile of crisis-prone vs. crisis-prepared organizations. ***Industrial Crisis Quarterly,*** 3: 231–241.

Montiel, I., Husted, B., y Christmann, P. 2012. Using private management standard certification to reduce information asymmetries in corrupt environments. ***Strategic Management Journal,*** 33: 1103–1113.

Ortiz-de-Mandojana, N. 2011. ***Gobierno Corporativo y Planteamiento Medioambiental de la Empresa.*** Granada: Ed. Universidad de Granada.

Ortiz-de-Mandojana, N., Aguilera-Caracuel, J., y Morales-Raya, M. Forthcoming. Corporate governance and environmental sustainability: The moderating role of the national institutional context. ***Corporate Social Responsibility and Environmental Management.***

Pauchant, T., y Mitroff, I. 1992. ***Transforming the crisis-prone organization***. San Francisco: Jossey-Bass.

Pearson, C. M. 2010. Dawn R. Gilpin and Priscilla J. Murphy: Crisis management in a complex world. ***Administrative Science Quarterly,*** 55: 170–171.

Pearson, C. M., y Clair, J. A. 1998. Reframing crises management. ***Academy of Management Review,*** 23: 59–76.

Pearson, C. M., y Mitroff, I. I. 1993. ***Academy of Management Executive,*** 7: 48–59.

Pearson, D. M., Roux-Dufort, C., y Clair, J. A. 2007. ***International Handbook of Organizational Crisis Management.*** Sage Publications.

Perlow, L. A., Okhuysen, G. A., y Repenning, N. P. 2002. The speed trap: Exploring the relationship between decision making and temporal context. ***Academy of Management Journal,*** 45: 931–955.

Perrow, C. 1984. ***Normal Accidents: Living with High-Risk Technologies.*** New York: Basic Books.

Peteraf, M. A. 1993. The cornerstones of competitive advantage: a resource –based view. ***Strategic Management Journal,*** 14: 179–191.

Porter, M. 1991. America's green strategy. ***Scientific American,*** 264: 168.

Porter, M. E., y Van Der Linde, C. 1995.Toward a new conception of the environment-competitiveness relationship. ***The Journal of Economic Perspectives,*** 9: 97–118.

Rerup, C. 2009. Attentional triangulation: Learning from unexpected rare crises. ***Organization Science,*** 20: 876–893.

Russo, M. V., y Fouts, P. A. 1997. A resource-based perspective on corporate environmental performance and profitability. ***Academy of Management Journal,*** 40: 534–559.

Sampson, R. C. 2005. Experience effects and collaborative returns in R&D alliances. ***Strategic Management Journal,*** 26: 1009–1031.

Schwartz, H. S. 1987. On the psychodynamics of organizational disaster: The case of the space shuttle Challenger. ***Columbia Journal of World Business,*** 22: 59-68.

Schwenk, C. H. 1996. Information, cognitive biases, and commitment to a course of action. ***Academy of Management Review,*** 11: 298–310.

Sethi, S. P. 1979. A conceptual framework for environmental analysis of social issues and evaluation of business response patterns. ***Academy of Management Review,*** 4: 63–74.

Sethi, S. P. 1994. Imperfect markets: Business ethics as an easy virtue. ***Journal of Business Ethics,*** 30: 803–815.

Sharma, S., y Henriques, I. 2005. Stakeholder influences on sustainability practices in the Canadian forest products industry. ***Strategic Management Journal,*** 26: 159–180.

Sharma, S., y Vredenburg, H. 1998. Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities. ***Strategic Management Journal,*** 19: 729–753.

Sheaffer, Z., y Mano-Negrin, R. 2003. Executives' orientations as indicators of crisis management policies and practices. ***Journal of Management Studies,*** 40: 573–606.

Shrivastava, P. 1993. Crisis theory/practice: Towards a sustainable future. ***Organization & Environment,*** 7: 23–42.

Shrivastava, P. 1995. Environmental technologies and competitive advantage. ***Strategic Management Journal,*** 16: 183–200.

Simon, H. A. 1976. ***Administrative Behavior.*** New York: Macmillan.

Slawinski, N., y Bansal, P. 2012. A matter of time: the temporal perspectives of organizational responses to climate change. ***Organization Studies,*** 33: 1537–1563.

Smart, C., y Vertinsky, I. 1977. Designs for crisis decision. ***Administrative Science Quarterly,*** 22: 640–657.

Staw, B. M., y Szwajkowski, E. 1975. The scarcity-munificence component of organizational environment and the commission of illegal acts. ***Administrative Science Quarterly,*** 20: 345–354.

Tong, T. W., y Li, Y. 2011. Real options and investment mode: Evidence from corporate venture capital and acquisition. ***Organization Science,*** 22: 659–674.

Turner, B. A. 1976. The Organizational and interorganizational development of disasters. ***Administrative Science Quarterly,*** 21: 378–397.

Vaughan, D. 1990. Autonomy, interdependence and social control: NASA and the space shuttle Challenger. ***Administrative Science Quarterly,*** 35: 225–257.

Vermeulen, F., y Barkema, H. 2002. Pace, rhythm, and scope: Process dependence in building a profitable multinational corporation. ***Strategic Management Journal,*** 23: 637–653.

Vinton, D. 1992. A new look at time, speed, and the manager. ***Academy of Management Executive,*** 6: 7–16.

Weick, K. E. 1988. Enacted sensemaking in crisis situations. ***Journal of Management Studies,*** 25: 305–317.

Weick, K. E. 1989. Mental models of high reliability systems. ***Industrial Crisis Quarterly,*** 3: 127–142.

Weitzel, W., y Jonsson, E. 1989. Decline in organizations: A literature integration and extension. ***Administrative Science Quarterly,*** 34: 91–109.

Wicks, D. 2001. Institutionalized mindsets of invulnerability: Differentiated institutional fields and the antecedents of organizational crisis. ***Organization Studies,*** 22: 659–692.

World Commission on Environment and Development (WCED). 1987. ***Our Common Future.*** Oxford: Oxford University Press.

# CAPÍTULO 2

# RACING TO THE BOTTOM: THE NEGATIVE CONSEQUENCES OF ORGANIZATIONAL SPEED*

* I am deeply indebted to Professor Pratima Bansal for her guidance, encouragement, and collaboration through the development of this paper. All remaining errors are mine.

# RACING TO THE BOTTOM: THE NEGATIVE CONSEQUENCES OF ORGANIZATIONAL SPEED


## ABSTRACT

Speed is often argued to be crucial for organizations to secure a competitive advantage. The faster that organizations can move, the greater distance that they can put between themselves and their competitors. In this paper, we argue that constant change also has its downsides. We focus specifically on organizational mishaps, arguing that greater speed leads to more mishaps. Organizations that move too fast tend to experience temporal myopia, miss the obvious, and stymie their learning. We support our insights with archival data from Coca-Cola Co. and PepsiCo Inc. In this paper, we highlight the need to explore the downsides of speed and discuss the implications to corporate social responsibility and irresponsibility. We also offer recommendations to managers to avoid organizational mishaps, if they choose to move quickly.



**Keywords:** organizational speed, organizational mishaps, temporal myopia, inattentional blindness, organizational learning.

## 2.1 Introduction

In February 2004, Coca-Cola Co. entered the U.K. water market by launching Dasani Water. Given the rapid growth of the U.K. bottled water market and their success in the U.S. market, the company assumed it would be successful in the U.K. However, Coca-Cola was prematurely optimistic. Two weeks after the launch, newspaper headlines reported troubles. A March 2004 *New York Times* headline read "Coke Recalls Bottled Water Newly Introduced to Britain" (Cowell, 2004).

Two things went wrong. First, Coca-Cola was producing Dasani water by filtering ordinary municipal tap water for chlorine and other mineral particles. The company then added a mineral mix for perceived fresh taste. Whereas this process seemed acceptable in the U.S., Europeans typically drank mineral and spring waters and felt duped by Coca-Cola's claims that Dasani was "pure." Second, the water exhibited excessive levels of bromate, which poses a cancer risk over the long term. Even though Coca-Cola tested its water regularly and was the first to notice that the U.K. legal standards had been exceeded, the water had already been placed on store shelves.

Although for Coca-Cola, the U.K. represented less than five per cent of its global market, the Dasani mishap had important corporate-wide consequences. The company estimated £25 million lost through the cancellation of productions contracts and advertising deals. Some analysts estimated the damage to the company's reputation to be 20 times that figure (Arlidge, 2004). Furthermore, the company decided to delay its launch of Dasani in Europe because of the negative publicity surrounding its failed launch of Dasani in the U.K. The corporation also appeared to be socially irresponsible, potentially putting its customers at risk.

The Dasani mishap led *The Guardian* newspaper to argue that Coca-Cola is "a giant that is so desperate for growth that it appears things are being overlooked" (Arlidge, 2004). As well, Coca-Cola was lauded in 2007 for the speed at which it acts, when Coca-Cola India was ranked second by *Businessworld* for the Most Respected Fast Moving Consumer Goods Companies (The Coca-Cola Company, 2007). We argue that Coca-Cola's pursuit of rapid growth may have, ironically, undermined its long-term value potential, because it keeps making mistakes. In other words, there are real costs to companies from moving too fast.

Fast food, fast cars, and even speed dating are the trend. Microwaves are often preferred to electric cook-tops and texting messages are often preferred to penning letters. The popular press and scholarly research is rife with examples of the need for companies to become more agile and move more quickly in response to hyper-competition and turbulent markets. Corporations rush to adopt new technologies, launch new products, and enter new markets faster than their competitors. The received wisdom is that organizations must change quickly in order to grab first mover advantages.

There is, however, a dark side to speed. Corporations that move too fast are likely to experience a larger number of organizational mishaps, contributing to corporate social irresponsibility and ultimately lower long-term value.

To explore the connection between organizational speed and mishaps, we analyzed archival data related to two very similar companies: Coca-Cola and PepsiCo. We dived deep into indicators of organizational speed, including mergers and acquisitions, strategic alliances, and CEO and equity turnover. We also analyzed the reported mishaps of both companies. We found significant evidence that Coca-Cola

experienced more change, that Coca-Cola experienced substantially more mishaps, and that Coca-Cola is seen as more socially irresponsible and has lower accumulated market capitalization than its closer rival, PepsiCo. We argue that these issues are related.

## 2.2 Organizational Speed and Adverse Organizational Outcomes

Organizational speed refers to "the frequency of different activities in a unit of social time" (Bluedorn, 2002: 104). Research on the consequences of organizational speed has assumed that organizational speed is beneficial to companies. That is why researchers have primarily focused on the positive impact of decision speed (Baum & Wally, 2003; Judge & Miller, 1991), innovation speed (Atuahene-Gima, 2003), and the speed of strategic responses on firm's performance (Más-Ruiz et al., 2005).

A few contemporary studies, however, have challenged this perspective, illustrating the dark side of speed. For example, Perlow, Okhuysen, and Repenning (2002) showed how Notes.com, an Internet start-up, became caught in a "speed trap"– a pathology created by the firm's past focus on speed. Managers' speed in decision making helped the organization reach its initial market goals. But as managers' aspirations and expectations increased, so did their commitments under time and attention constraints, and their inability to achieve goals. Speed became self-fulfilling or endogenous, so that more speed contributed to bad decisions, which encouraged the firm to seek greater speed to compensate for the mistakes. Eventually, the company became bankrupt.

In another study, Forbes (2005) explored the implications of decision speed on organizational survival. With a sample of 98 small Internet startups in "Silicon Alley" (a community of internet-related new ventures in the New York City metropolitan area),

he found that bankruptcies were more common among companies with high decision speed. Specifically, companies that made faster decisions were likely to have shut down within four years.

Forbes (2005) pointed out that the average of decision speed in "Silicon Alley" was quite a bit shorter (4.6 months) than the decision speed in other academic studies undertaken in dynamic environments. The average of decision speed in Eisenhardt's study (1989) of microcomputers firms was 7.7 months, and in Judge and Miller's (2002) study of biotechnology firms was 18.7 months. Forbes suggested that the Internet firms in "Silicon Alley" pushed their decision-making practices to such a high speed that the potential positive performance effects of speed (e.g. the first to adopt a new technology) were suppressed because managers were not able to address issues such as technology implementation snags or irreconcilable alliance conflicts. Much like in Notes.com, the problems accumulated and aggravated one another. These studies show that there are limits to the value of making decisions too quickly regardless how intense the environmental imperatives may be perceived.

Slawinski and Bansal's (2012) study of companies in Canada's oil sands found that organizational speed influenced firms' approach to complex issues such as climate change. Firms that moved too fast took a fragmented approach to climate change, rather than seeking holistic solutions. Such fragmented approaches exposed the company to reprimands by stakeholders.

Although the merits of speed are discussed widely, too little attention is paid to the costs. In this article, we argue that too much speed can increase the risk of organizational mishaps, which we define as organizationally induced events that can threaten the viability of organizations (Pearson & Clair, 1991). Not only do mishaps

cost the organization money, they can damage its reputation. They can also have wider implications on society, contributing to the firm's social irresponsibility as witnessed by the bromate in Coca-Cola bottles.

We were motivated to conduct this analysis and write this paper after reflecting on the many major mishaps that have occurred within firms that have experienced considerable CEO turnover, such as Merck, Hewlett-Packard, and Coca-Cola. These organizations were once heralded as bastions of corporate social responsibility with strong, visionary leadership. However, over time, the reputations of these corporations have eroded.

Such firms stand in stark contrast to others such as General Electric that supported their CEOs, in this case Jeffrey Immelt, even in the face of poor earnings. Prior research and managerial publications often tout the merits of CEO turnover, as it improves organizational responsiveness, prevents companies from organizational inertia and in turn, from experiencing organizational crises (Greening & Johnson, 1996). We hope to balance this prior work by arguing that too much speed has its downside.

## 2.3 The Contrast between Coca-Cola and Pepsico

### 2.3.1 The Corporate Context

Coca-Cola is the world's largest producer of soft drink concentrates and syrups and juice-related products. The company was founded in 1886 and is presently headquartered in Atlanta. PepsiCo is a leader in beverages and global snacks. The company was founded in 1898 and is headquartered in Purchase, New York. There are few companies that are more similar than are Coca-Cola and PepsiCo. Table 2.1 shows some firm-level data for comparison.

**TABLE 2.1**
**Comparison of Firm-Level Characteristics for 2010**

| | Company Name | |
|---|---|---|
| | **Coca-Cola** | **PepsiCo** |
| Number of employees (thousands) | 139.6 | 294 |
| Total assets (millions) | 72,921 | 68,153 |
| Total revenues (millions) | 35,119 | 57,838 |
| Pre-tax return on assets (%) | 13.15 | 14.47 |
| Total value of common shares outstanding (millions) | 150,745 | 103,287 |
| Debt/equity ratio | 0.76 | 1.18 |

Recent changes in consumer preferences in the food and beverage industry offer an appropriate context in which to illustrate organizational speed. Consumers not only continue expecting products to taste good, but now they also expect some type of additional health characteristics, such as low-calorie, added vitamins and minerals, or energy providing. In order to respond to this demand, beverage companies are focusing on responding quickly by offering higher value healthier products.

### 2.3.2 Organizational Speed at Coca-Cola and PepsiCo

We assessed Coca-Cola's and PepsiCo's organizational speed by the number of mergers and acquisitions (M&As), the number of strategic alliances, CEO tenure, and volume of corporate shares traded yearly from 2000 to 2010. We chose this specific time frame because organizational processes had accelerated over this period. All speed related data were drawn from a number of publicly available databases. We summarize these findings in Table 2.2.

**TABLE 2.2**
**Organizational Speed and Mishaps for 2000-2010**

| | Company Name | |
|---|---|---|
| | **Coca-Cola** | **PepsiCo** |
| **Indicators of Speed** | | |
| Yearly average tenure of the last 4 CEOs | 3.3 | 6.3 |
| Number of M&As | 53 | 27 |
| Number of strategic alliances | 30 | 10 |
| Yearly average of shares turnover | 1.2 | 0.9 |
| **Organizational Mishaps** | | |
| Number of mishaps reported by the WSJ | 26 | 9 |
| Concerns reported by KLD | 110 | 59 |

We observed a marked difference in the number of **mergers and acquisitions** between Coca-Cola and PepsiCo. From 2000 to 2010, Coca-Cola acquired 53 companies, whereas PepsiCo acquired only 26.

There is a similar pattern with **strategic alliances**. Over the same period, Coca-Cola engaged in 30 strategic alliances, whereas PepsiCo only engaged in 10. Coca-Cola has chosen a rapid growth strategy through alliances and acquisitions, and PepsiCo has favored more deliberate, slower organic growth.

Adding complexity to Coca-Cola's growth activities was the number of **CEO changes** the company endured. Since Roberto Goizueta left the company in 1997, the average CEO tenure for the last 4 CEOs at Coca-Cola was only 3.3 years, whereas it was 6.3 years for PepsiCo.

An indicator of such rapid changes in organizational activities is the **volume of common shares traded.** The shares traded over the total number of free-floating shares

were 1.2 for Coca-Cola and 0.9 for PepsiCo for the period of 2002 to 2010 (data prior to 2002 are not available).

### 2.3.3 Mishaps and Corporate Social Irresponsibility at Coca-Cola and PepsiCo

Organizational mishaps impact stakeholders negatively, which is a form of corporate social irresponsibility (Strike & Bansal, 2006). Organizational mishaps include recalls, boycotts, lawsuits, protests, and other corporate irregularities that result in loss of profits, loss of life, loss of reputation, or injuries and damage (Greening & Johnson, 1996). We identified all unique actual mishaps by retrieving news related to Coca-Cola and PepsiCo from the *Wall Street Journal (WSJ)* from 2000 to 2010. Over this period organizational mishaps were abundant in both firms. We did not include the following: mere allegations, investigations, or lawsuits without resolution; acts that could be considered as deliberate individual or organizational malfeasance; and, mishaps unrelated to firm actions, such as disasters caused by earthquakes, floods, hurricanes and other natural disasters.

Coca-Cola experienced 26 mishaps and PepsiCo experienced 9 reported by the *WSJ*. We found six major categories of mishaps: (1) finance, (2) products, (3) marketing, (4) contracts, (5) environment, and (6) society. Table 2.3 shows an overview of Coca-Cola's mishaps from 2000 to 2010 and Table 2.4 shows and overview of PepsiCo's mishaps for the same period. These results were consistent with KLD's report of the company's "concerns," which are often deemed as corporate social irresponsibility in areas that are related to our categories. KLD assigned 110 concerns to Coca-Cola and 59 to PepsiCo.

**TABLE 2.3**
**Overview of Coca-Cola's Mishaps from 2000 to 2010**

| Category | Subcategory | Brief description of Coca-Cola's mishaps |
|---|---|---|
| **FINANCE** | Misleading investors | • Shareholder lawsuit alleging that Coca-Cola misled investors by artificially inflating its stock price. |
| **PRODUCTS** | Product recall | • Withdrawal of 700,000 bottles of Fanta Pomelo marketed in Belgium because exposure to light had affected the soda's color and taste.<br>• Recall of two drinks in Japan because a product ingredient was not approved for use in that country.<br>• Recall of all Dasani bottled water in the U.K. because of excessive levels of bromate.<br>• Recall of about 570,000 bottles of soft drinks sold in Japan because some drinks contained a small amount of iron powder.<br>• Suspension of production of Coke Zero and withdrawal of the beverages from its retails because government officials in Venezuela concluded health risks to consumers. |
| | Pesticides in soft drinks | • A Delhi-based NGO found high levels of pesticides and insecticide in some Coca-Cola soft drinks.<br>• Ban (later overtunned) on the production and sale of Coca-Cola in Kerala because of high levels of pesticides alleged by a New Delhi-based private research group. |
| **MARKETING** | Marketing and sales practices that violate antitrust laws | • Coca-Cola was found guilty of violating state antitrust laws by a Texas state-court jury.<br>• Mexico's Antitrust Commission found Coca-Cola guilty of abusing of its dominant position.<br>• The European Union Commission settled a six-year antitrust dispute with Coca-Cola putting strict limits on the soft drink maker's sales tactics. |
| | Use of image in advertising | • Lawsuit against Coca-Cola's China subsidiary because of using the image of a basketball sensation without his permission. |
| | Misleading claims advertising | • Coca-Cola was sued by PepsiCo because of false claim between Powerade Option and Gatorade.<br>• Coca-Cola and Nestle SA paid $650,000 as part of a pact with 27 states to resolve a marketing dispute over claims about Enviga.<br>• The Food and Drug Administration (FDA) called on Coca-Cola to revise the label on a version of its Diet Coke brand because of inappropriate nutritional claims. |
| **CONTRACTS** | Distribution contracts | • 55 independent bottlers filed two lawsuits against Coca-Cola. Later the bottlers agreed to drop the lawsuits. |
| | Patent infringement | • Coca-Cola settled two patent-infringement lawsuits by P&G. |
| **ENVIRONMENT** | Ozone depletion | • Coca-Cola broke "Green Games" environmental guidelines at Olympic sites in Australia by including bans on hydrofluorocarbons (HFC) in refrigeration. |
| | Water-management practices | • Protest of local residents outside a Coca-Cola bottling plant in Kerala accusing Coca-Cola of extracting so much water that their wells dried up or yielded brackish undrinkable water.<br>• Shut down of a Coca-Cola bottling plant because of claims by local residents and Indian activists that the company drained and polluted local water suppliers.<br>• Students' complaints at University of Michigan arguing that company's water-management practices violated the university's code of conduct for vendors. |
| | Pollution and waste disposal | • A local water official blames a Coca-Cola plant for polluting groundwater by releasing wastewater into surrounding land in Varsani (India). |
| | Environmental behavior | • Half-dozen colleges decided not to renew contracts with Coca-Cola or boycott it because of pressure from student protesters about the company's environmental behavior. |
| **SOCIETY** | Human rights abuses | • Ban on the sale of products on the Union Theological<br>• Seminary campus (NY) because of considerable evidence of human rights violations and environmental damage abroad. |
| | Disparities in payments | • More than 2000 current and former employees were underpaid. |
| | Lack of diversity | • An independent task force says executive-level promotions at<br>• Coca-Cola reflected an absence of diversity. |

**TABLE 2.4**
**Overview of PepsiCo's Mishaps from 2000 to 2010**

| Category | Subcategory | Brief description of PepsiCo's mishaps |
|---|---|---|
| PRODUCTS | Product Recall | • Recall of some Aunt Jemima pancake and waffle mix products because of potential salmonella contamination<br>• Ban (later overturned) on the production and sale of PepsiCo in Kerala because of high levels of pesticides alleged by a New Delhi-based private research group. |
| | Pesticides in soft drinks | • A Delhi-based NGO found high levels of pesticides and insecticide in some PepsiCo's soft drinks. The Court of Rajasthan (India) ordered to indicate those pesticide residues on the soft drinks labels. |
| | Product labeling | • A woman became ill after eating Ruffles Light chips because they were made with olestra (a fat substitute). The Center for Science in the Public Interest threatened to sue Frito-Lay unless it better disclosed the presence of olestra in the package. |
| MARKETING | Claims in advertisement | • PepsiCo agreed to change the look of its SoBe Life Water drink to settle a lawsuit by a campaign that promotes itself as pioneering nutrient-enhanced water maker. |
| | Criticism | • Criticism of the biodegradable Sun Chips potato bags (Frito-Lay) in blogs and Facebook because of its enormous noise. |
| ENVIRONMENT | Water pollution | • PepsiCo's bottling plant in Changchun, a part of Jilin Province, was listed as discharging illegal amounts of polluted water on the local environmental-protection bureau's web site. |
| SOCIETY | Boycott because of cultural disrespect | • The Hip-Hop Summit Action Network called for a boycott of PepsiCo over what the group called the company's "cultural disrespect" of hip-hop culture. |
| | Controversy with the Catholic Church in Rio de Janeiro | • Brazil's Catholic Church was mad because PepsiCo unit used the statue's image of Cristo Redentor (Rio de Janeiro's famous mountaintop statute with the outstretched arms) in beer and soda-pop ads alleging that the church has held legal rights to images of Cristo Redentor since 1931. |

## 2.4 Why Organizational Speed Creates Mishaps?

We argue that organizational speed contributes to organizational mishaps for three reasons: they cause temporal myopia, they obscure the obvious, and they stymie organizational learning. We discuss each in turn.

### 2.4.1 Causes Temporal Myopia

Too much change focuses managers' attention on the present. Since managers' attention is limited, an excessive focus on the present can limit their attention on the future contributing to temporal myopia (Miller, 2002) and resulting in organizational mishaps.

Processes such as M&As, strategic alliances and the CEO succession are complex and in turn, include many interdependent and complex sub-processes. For example, engaging in M&As requires firms to select potential targets, exercise due diligence and research the target firm, negotiate the agreement, identify sources of finances and eventually integrate the two companies (Hitt et al., 2001). All of these processes take time, so the greater the frequency of M&As, the more time is spent in meetings, managing and analyzing information, and meeting deadlines.

As managerial attention turns to these tasks, there is less attention for non-urgent issues. Meetings, negotiations, data analysis, and many other tasks related to managing M&As, strategic alliances, and working with a new CEO take precedence over more strategic issues that build long-term value. Managers bracket their activities, focusing only on short term, immediate issues. They will be unable to make connections between the past, present and future, and often fail to assess the long-term consequences of their actions (March, 1999). If managers cannot foresee the future, they risk overvaluing the present and undervaluing the long-term.

A heavy focus on the short term, particularly short-term financial results, can instigate corruption. A study conducted by Salter (2013) found that such a short-term focus provoked the gaming of Security Exchange Commission (SEC) rules by Citigroup in 2007. Citigroup marketed a high-risk mortgage fund, which did not clearly and fully disclose to clients that the company would benefit if these assets declined in value. When the U.S. housing market declined, the Citigroup benefited from the losses of their investors. Salter suggested that monetary interest in the success of a transaction and executive payoffs based on short-term performance measures could have motivated executives to game the SEC financial reporting rules.

Salter (2013) also argued that shorter CEO tenures cause myopia because managers over-emphasize impacts from their activities during their tenure than on those that happen after they leave. CEOs with a shorter expected tenure often prefer to take actions with near-term outcomes, even though such actions can have negative long-term consequences.

We believe that such myopia contributed to propensity for Coca-Cola to experience more mishaps. For example, the residents of India's Kerala province claimed in 2002 that Coca-Cola was drawing too much drinking water for its products, resulting in the wells drying up. Even though Coca-Cola may have heard the claims, they may not have fully assessed the long-term consequences of continuing with their water management practices.

The impacts of maintaining their water-management practices became quite salient in the following years. A Coca-Cola bottling plant was forced to shut down in 2004. In 2005, concerns about the use of water escalated in students' complaints so that six colleges in the U.S. did not renew contracts with Coca-Cola. The company was also blamed for polluting groundwater and disposing waste irresponsibly.

### 2.4.2 Obscures the Obvious

People have cognitive limits to what they can perceive in the environment. When confronting many cues, managers often choose those that are predictable, accessible, and certain, sometimes missing what is important. If the range of cues is incomplete, then so will the managers' interpretation of the environment. This incomplete picture can have adverse organizational consequences and result in mishaps.

By focusing attention on one task, managers are better able to perceive task-related signals and act on them, but, at the same time, such disciplined attention can block out other relevant information, especially visual information -- a phenomena called "inattentional blindness" (Bazerman, 2006). Inattentional blindness has been illustrated through a video in which one group of people wearing white shirts and another group wearing dark shirts passed balls with their teammates. Viewers are asked to count the number of passes within groups. In the middle of the video, a woman carrying an open umbrella walks across the screen. Only 21 percent of viewers reported even seeing the woman (Neisser, 1979).

When Novo Nordisk's management focused attention on a merger, they failed to comply with the U.S. Food and Drug Administration (FDA) manufacturing standards (Rerup, 2009). Managers and employees in manufacturing and quality knew that they should document and verify the Novo Nordisk manufacturing processes and even asked for more staff to help comply with the standards. However, middle managers rejected the request because they were trying to build the marketing capabilities for the merger. Ultimately, the Novo Nordisk lost its license to sell insulin in the United States for six months, during which time its major competitor, Eli Lilly, took over most of its U.S. customers.

Coca-Cola seemed to be missing some very important and visible signals about the European market. For example, the importance of spring water to Europeans, over tap water, should have been evident by observing consumers' behavior. It should not have been much of a surprise that Dasani's introduction to Britain in 2004, with mineral-enhanced tap water, would receive strong negative reactions from consumers. The company also failed to notice the excess of bromate in its Dasani product before it

was on store shelves. Inattentional blindness from organizational speed may have contributed to these failures.

### 2.4.3 Stymies Learning

Unexpected mishaps often trigger learning (Madsen & Desai, 2010). For example, studies showed that organizations that learned from their direct experience with coal mining accidents were able to prevent future disasters (Madsen, 2009) and that prior accident experience among large U.S. airlines also reduced the rate of future accidents (Haunschild & Sullivan, 2002).

However, organizations need time to learn from such mishaps. They need to understand the underlying causes of the issues to avoid repeating them (Rerup, 2009). Mishaps are often novel, so it take time to build a shared understanding of what occurred and why. These shared understandings are often developed through dialogue, in which staff can talk about their opinions and intuitions, ask questions, explore alternatives, and exchange views about a mishap (Beck & Plowman, 2009). This exchange of views helps staff to look for connections to other events and underlying causes to build a common interpretation of the mishap, and to determine joint action (Isabella, 1990). Such efforts take even longer when staff comes from different units and different backgrounds.

Research has shown that one of the reasons why staff in hospitals failed to learn from failure was time pressure. Nurses did not have the time to identify the core causes of failures such as missing or broken equipment and supplies or incorrect information that arose in day-to-day activities. They worked under an efficiency model and could not keep up with their responsibilities (Tucker & Edmondson, 2003).

Coca-Cola has made several mistakes, including creating racial imbalances and pay inequities. For example, The Labor Department discovered salary discrepancies for 2000 employees in a review of the company's pay practices over 2000 and the previous year. In 2000, the company also settled a highly publicized class-action discrimination lawsuit from its African American employees because of wide disparities in pay and promotions. After the discrimination lawsuit, the company stressed publicly: "We've *learned* a great deal about our human resources practices, and we're acting on what we've *learned*" (McKay, 2002: B16) and "We will continue to listen to and *learn from the task force*, other outside experts and you" (Morse, 2002: A9) [italics added]. Despite this public emphasis on having learned, the Labor Department task force announced in 2003 that the company failed to make sufficient efforts to foster diversity, which raises legitimate questions about the company's ability to learn from its past mishaps.

## 2.5 The Costs of the Mishaps

There are two important consequences of mishaps: corporate social irresponsibility and the erosion of long-term value. Firms that act irresponsibly through mishaps risk losing staff and can have difficulty attracting customers, investors, and employees because of the firm's negative reputation (Fombrun, 1996). These firms may experience more lawsuits and cost the firm millions of dollars in fines or settlements (Davidson et al., 1994), which will inevitably impact profits, erode the stock price performance (Baucus & Baucus, 1997), and potentially reduce the quality of network partners (Haunschild et al., 2007).

The flip side of corporate social irresponsibility is related to corporate social responsibility, which is often more easily achieved through a long-term strategy. PepsiCo has systematically demonstrated a commitment to long-term steady growth and

a holistic view of its operations. Indra Nooyi, CEO of the company since 2006, stated that *"*We can no longer be focused on the short term, we must think long term...*"* (Younker, 2009). She also manifested that the view of a company as an engine of short-term value is an old one and that "the new CEO has to create sustainable value. They have to think long term and align all metrics in the company at every level on the longer-term" (WBCSD, 2011).

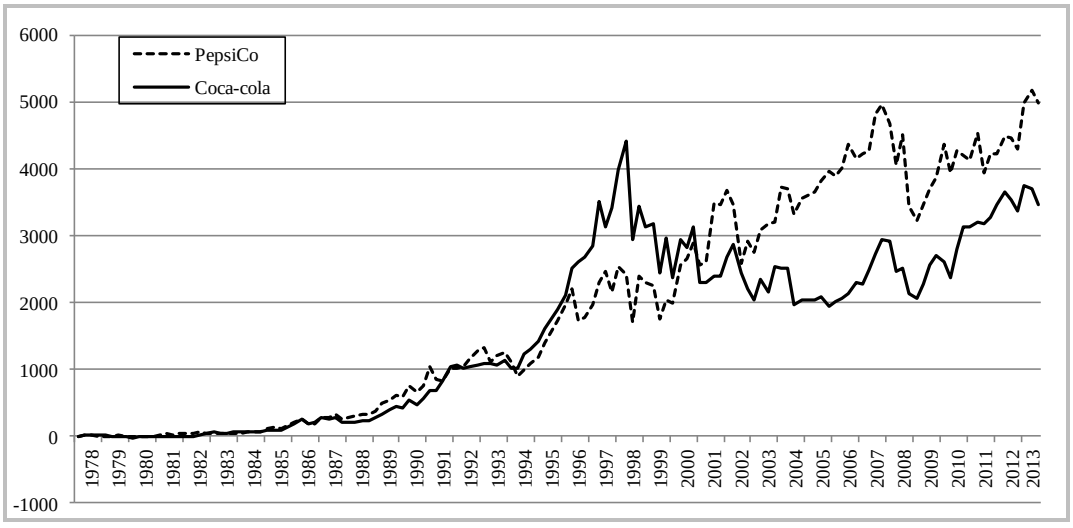
This long-term view resulted in the PepsiCo's vision of "Performance with Purpose," which refers to the company's commitment to sustainable financial growth by providing healthy food, maintaining environmental integrity, and supporting employees and the community. In addition, PepsiCo included its first corporate social responsibility report within its annual report published in 2003. Since then, the company has embraced a long-term view of its environmental goals. For example, in 2007, PepsiCo claimed also in its annual report that "By 2015 we will reduce per-unit water consumption by 20%, electricity consumption by 20% and manufacturing fuel consumption by 25%" (PepsiCo Inc., 2007: 5).

Coca-Cola, on the other hand, has not offered long-term goals beyond the financial ones. The company introduced its long-term vision in 2009, stating in its annual report that *"*our 2020 vision provides a set of shared principles, priorities and actions focused on creating long-term sustainable growth and shareholder value" (The Coca-Cola Company, 2009: 2). In 2010, as part of its 2020 goals, the company disclosed its environmental statement, environmental impact and savings, and declared, also in its annual report, that it wants to be a global leader in sustainable water use, packaging, energy, and climate protection. In the last years, Coca-Cola has been working to achieve water neutrality and to develop fully recyclable PET plastic

beverage bottles made partially from plants (Green, 2011). The 2020 vision of Coca-Cola could be indicating that the company is switching from a short-term focus towards a more long-term one that includes social and environmental concerns.

In addition to corporate social responsibility and irresponsibility, organizations fixated on a short-term strategy are also likely to undermine their firm's value over the long term. Coca-Cola's accumulated market capitalization fell behind PepsiCo's from 2000 to 2010 and this difference was even more accentuated in the last years of the period (see Figure 2.1).

**FIGURE 2.1**
**Accumulated Percentage of Market Capitalization for Coca-Cola and PepsiCo for 1978-2013**



## 2.6 Lessons for Managers

By recognizing that too much speed may be related to mishaps, managers are better equipped at preventing them by following a few basic rules.

***Managers are not divine; they are human and must acknowledge their limitations***

"How could not I see that?" This question reflects people's limitations to assess the consequences of their actions (i.e. temporal myopia), to perceive their environment (i.e. failure to see the obvious), and to understand the underlying reasons for their mishaps (i.e. learning). Organizations can jump on a treadmill that moves increasingly faster, but human capacity to absorb change has limits. By acknowledging these limitations on capacity, managers could reconsider the speed of the company to avoid mishaps.

Managers should favor working in groups for periods of intense activity related to M&As, strategic alliances, or the search for a new CEO. This practice can be useful to keep eyes open to environmental cues and analyze the causes of the mishaps that the company experienced. If human capacity is taken to the limit in the pursuit of fast growth, managers should consider choosing more deliberate, sustained growth.

***Balance is good, including pacing changes in your company***

Organizations need to be able to change rapidly to respond to new competitors, changing consumer preferences, and disruptions in financial markets. Companies that change too fast, however, can fall into a speed trap, where managers give more importance to decision speed at the expense of decision content (Perlow et al., 2002). These dynamics can eventually contribute to the company's bankruptcy. We argue in

this paper that mishaps are likely the first step towards catastrophic outcomes, such as bankruptcy.

The other extreme is the case of companies that grow too slowly and can fall into a slow trap, where the quality of content is emphasized at the expense of speed and slow planned decisions are continuously reinforced (Perlow et al., 2002). These companies miss opportunities because they spend too much time thinking about decisions.

Changing too fast can be as problematic as changing too slowly. Managers should avoid both extremes, and look for balance. Balance implies to be fast when it makes sense to be fast instead of doing everything fast (Honoré, 2004). By balancing organizational pace, companies will be able to take advantage of opportunities while calibrating their steps to avoid mishaps and falling into a trap. Managers should continuously reflect on their organization's growth rates, and ensure that the content of decisions is appropriately valued. Another good practice consist of including speed-based metrics, that is, to track the frequency of key operations that can drain lots of time and have the potential to take managers' cognitive limitations to the limit.

***Do not stumble on the same stone***

The Spanish say "man is the only animal that stumbles twice on the same stone."[1] This expression recognizes the challenges of learning from errors. In this paper, we argue that managers are more likely to stumble, if they run too fast.

Managers willing to learn from the experience of mishaps should keep in mind that organizations do not learn overnight but requires effort and time. If managers are

[1] In Spanish: *El hombre es el único animal que tropieza dos veces en la misma piedra.*

unable to find time to promote meetings and exchange interpretations about why a mishap happened, they should think that speed can impede learning from those events. In such cases, managers should block time on the agenda for those learning activities. Following external recommendations can also be of help to learn from mishaps and to slow down.

## 2.7 Conclusion

In this article we showed that mishaps are related to organizational speed. We illustrated through the cases of Coca-Cola and PepsiCo. Specifically, Coca-Cola introduced much more changes during the 2000-2010 period and experienced many more mishaps than its closest rival, PepsiCo, did. We suggest that sustained rapid changes can lead to mishaps because speed takes cognitive limitations to the limit and undermines the firms' ability to learn. We finally offered recommendations for managers to mitigate the risks of speed.

## 2.8 References

Arlidge, J. 2004. Don't Drink the Water. ***The Guardian***. Last accessed March 23, 2014. *http://www.theguardian.com/lifeandstyle/2004/apr/18/foodanddrink.*

Atuahene-Gima, K. 2003. The effects of centrifugal and centripetal forces on product development speed and quality: How does problem solving matter? ***Academy of Management Journal,*** 46: 359–373.

Baucus, M. S., & Baucus, D. A. 1997. Paying the piper: An empirical examination of longer-term financial consequences of illegal corporate behavior. ***Academy of Management Journal,*** 40: 129–151.

Baum, J. R., & Wally, S. 2003. Strategic decision speed and firm performance. ***Strategic Management Journal,*** 24: 1107–1129.

Bazerman, M. H. 2006. ***Judgement in Managerial Decision Making.*** New York: John Willey.

Beck, T. E., & Plowman, D. A. 2009. Experiencing rare and unusual events richly: The role of middle managers in animating and guiding organizational interpretation. ***Organization Science,*** 20: 909–924.

Bluedorn, A. C. 2002. ***The Human Organization of Time.*** Stanford: Standford University Press.

Cowell, A. 2004. Coke Recalls Bottled Water Newly Introduced to Britain. ***The New York Times.*** Last accessed March 23, 2014. *http://www.nytimes.com/2004/03/20/business/international-business-coke-recalls-bottled-water-newly-introduced-to-britain.html?n=Top%2fReference%2fTimes%20Topics%2fSubjects%2fW%2fWater.*

Davidson, W. N., Worrell, D., & Cheng, L. T. W. 1994. The effectiveness of OSHA penalties: A stock-market-based test. ***Industrial Relations,*** 33: 283–296.

Eisenhardt, K. 1989. Making fast strategic decisions in high-velocity environments. ***Academy of Management Journal,*** 32: 543–576.

Fombrun, C. 1996. ***Reputation: Realizing Value from the Corporate Image*****.** Cambridge: Harvard Business School Press.

Forbes D. P. 2005. Managerial determinants of decision speed in new ventures. ***Strategic Management Journal,*** 26: 355–366.

Green, S. 2011. Coca-Cola's CEO on Doubling the Size of his Company. ***Harvard Business Review***. Last accessed March 23, 2014. *http://blogs.hbr.org/2011/09/coca-colas-ceo-on-doubling-the.*

Greening, D. W., & Johnson, R. A. 1996. Do managers and strategies matters? A study in crisis. ***Journal of Management Studies,*** 33: 25–51.

Haunschild, P. R., & Sullivan, B. N. 2002. Learning from complexity: effects of prior accidents and incidents on airlines' learning. ***Administrative Science Quarterly,*** 47: 609–643.

Haunschild, P. R., Sullivan, B. N., & Page, K. 2007. Organizations non-gratae? The impact of unethical corporate acts on interorganizational networks. ***Organization Science,*** 18: 55–70.

Hitt, M. A., Harrison, J. S., & Ireland, R. D. 2001. ***Mergers and Acquisitions: A Guide to Creating Value for Stakeholders.*** New York: Oxford University Press.

Honoré, C. 2004. ***In Praise of Slowness: Challenging the Cult of Speed.*** HarperCollins e-books.

Isabella, L. A. 1990. Evolving interpretations as a change unfolds: How managers construe key organizational events. ***Academy of Management Journal,*** 33: 7–41.

Judge, W. Q., & Miller, A. 1991. Antecedents and outcomes of decision speed in different environmental contexts. ***Academy of Management Journal,*** 34: 449–463.

Madsen, P. M. 2009. These lives will not be lost in vain: organizational learning from disaster in U.S. coal mining. ***Organization Science,*** 20: 861–875.

Madsen, P. M., & Desai, V. 2010. Failing to learn? The effects of failure and success on organizational learning in the global orbital launch vehicle industry. ***Academy of Management Journal,*** 54: 451–476.

March, J. G. 1999. Research on organizations: Hopes for the past and lessons from the future. ***Nordiske Organisasjonsstudier,*** 1: 69–83.

Más-Ruiz, F. J., Nicolau-Gonzálbez, J. L., & Ruiz-Moreno, F. 2005. Asymmetric rivalry between strategic groups: response, speed of response and ex ante vs. ex post competitive interaction in the Spanish bank deposit market. ***Strategic Management Journal,*** 26: 713–745.

McKay, B. 2002. Coke to Pay Total of $8.1 Million in Back Salaries. ***Wall Street Journal,*** May 28: B16.

Miller, K. D. 2002. Knowledge inventories and managerial myopia. ***Strategic Management Journal,*** 23: 689–706.

Morse, D. 2002. Coke Rated "Acceptable" on Diversity - Task Force Overseeing Effort Criticizes Selection to Board Of Two White Executives. ***Wall Street Journal,*** September 26: A9.

Neisser, U. 1979. The concept of intelligence. ***Intelligence,*** 3: 217–227.

Pearson, C. M., & Clair, J. A. 1998. Reframing crises management. ***Academy of Management Review,*** 23: 59–76.

PepsiCo Inc. 2007. Annual Report.

Perlow, L. A., Okhuysen, G. A., & Repenning, N. P. 2002. The speed trap: exploring the relationship between decision making and temporal context. ***Academy of Management Journal,*** 45: 931–955.

Rerup, C. 2009. Attentional triangulation: Learning from unexpected rare crises. ***Organization Science,*** 20: 876–893.

Salter, M. S. 2013. Short-Termism at its Worst: How Short-Termism Invites Corruption... And What to Do About It? Working paper Nº 5, Harvard University. Last accessed March 23, 2014. *http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2247545.*

Slawinski, N., & Bansal, P. 2012. A matter of time: Temporal perspectives in organizational responses to climate change. ***Organization Studies,*** 33: 1537–1563.

Strike, V. M., & Bansal, P. 2006. Being good while being bad: Social responsibility and the international diversification of U.S. firms. ***Journal of International Business Studies,*** 37: 850–862.

The Coca-Cola Company. 2007. Annual Report.

The Coca-Cola Company. 2009. Annual Report.

Tucker, A. L., & Edmondson, A. C. 2003. Why hospitals don't learn from failures: organizational and psychological dynamics that inhibit system change. ***California Management Review,*** 45: 55–72.

World Business Council for Sustainable Development (WBCSD). 2011. People Matter Lead. Last accessed March 23, 2014. *oldwww.wbcsd.org/Plugins/DocSearch/details.asp?DocTypeId=25&ObjectId=40060&URLBack=%2Ftemplates%2FTemplateWBCSD2%2Flayout.asp%3Ftype%3Dp%26MenuId%3DODU%26doOpen%3D1%26ClickMenu%3DRightMen.*

Younker, T. 2009. Indra Nooyi: New Era of Business. Last accessed March 23, 2014. *http://asiasociety.org/business/economic-trends/indra-nooyi-new-era-business.*

# CAPÍTULO 3

# THE INFLUENCE OF ORGANIZATIONAL SPEED ON ORGANIZATIONAL MISHAPS. THE MODERATING ROLE OF INDUSTRY DYNAMISM*

* A substantial part of this research was undertaken while I was a visiting scholar at Ivey Business School, Western University, London (Ontario, Canada). I am indebted to Professor Pratima Bansal for her guidance, advice and invaluable comments through the development of a preliminary version of this paper. All remaining errors are mine.

# THE INFLUENCE OF ORGANIZATIONAL SPEED ON ORGANIZATIONAL MISHAPS: THE MODERATING ROLE OF INDUSTRY DYNAMISM


## ABSTRACT

Previous studies have shown the importance of organizational speed for firms' competitive advantage and financial performance. However, more recent studies have also demonstrated that speed can be detrimental for companies. Drawing on the managerial cognitive perspective, we argue that organizational speed can contribute to organizational mishaps. We focus on organizational speed in relation to firms' mergers and acquisitions and strategic alliances. Based on a sample of 331 companies in the United States over the period 2003-2009, our findings suggest that organizational speed has a positive influence on firms' mishaps. Furthermore, we find that this effect is stronger when firms operate in dynamic environments.



**Keywords**: organizational speed, organizational mishaps, industry dynamism, managerial cognitive perspective, cognitive limitations.

## 3.1 Introduction

Globalization has been driven by a vertiginous advent of new techniques and technologies that have amplified the importance of taking fast action (Barkema, Baum & Mannix, 2002). Rankings such as the *Most Respected Fast Moving Consumer Goods Companies* have emerged to reward firms that move fast, and the popular press *Fast Company* magazine counsels on how to speed up (Perlow, Okhuysen, & Repenning, 2002). Organizational speed, which refers to "the frequency (number) of activities in some unit of social time" (Bluedorn, 2002: 104), has also been embedded in scholarly research on decision making (e.g., Baum & Wally, 2003; Forbes, 2005; Kownatzki et al., 2013; Perlow et al., 2002), product innovation (e.g., Atuahene-Gima, 2003; Kessler & Chakrabarti, 1996), post-merger integration (Bauer & Matzler, 2014; Homburg & Bucerius, 2006), and speed of response (e.g., Bansal, 2003; Más-Ruiz, Nicolau-Gónzalbez, & Ruiz-Moreno, 2005; Slawinski & Bansal, 2012).

Some prior studies on organizational speed have shown its positive effect on firms' financial performance based on first moving advantages (e.g., Eisenhardt, 1989; Baum & Wally, 2003; Judge & Miller, 1991). More recent studies, however, have argued that organizational speed can also be detrimental for organizations (e.g., Forbes, 2005; Perlow et al., 2002; Slawinski & Bansal, 2012). For example, Perlow and colleagues (2002) illustrated that too much speed can lead a company to a "speed trap," where organizational members believe that they had to make ever faster decisions to survive, but this emphasis on speed eventually resulted in organizational decline. Forbes (2005) showed that bankruptcies were more common among companies with a high decision speed. These studies are insightful because they highlight the downsides of organizational speed. However, in addition to the extreme situations of organizational

decline and bankruptcy, firms experience a wide variety of organizational mishaps that may be influenced by speed.

Organizational mishaps are organizationally induced events that can threaten the viability of organizations (Pearson & Clair, 1998), such as groundwater contaminations, product recalls and boycotts (e.g., Pearson & Clair, 1998), and product tampering (e.g., Greening & Johnson, 1996). Mishaps can result in a loss of profit, injuries, damage, the deterioration of the firm's reputation, or even loss of life (Greening & Johnson, 1996). Prior research on the causes of mishaps have identified that cognitive limitations, such as difficulties in managing information, and the use of heuristics such as knowledge structures and the less careful consideration of alternatives (Bazerman, 2006; Schwenk, 1996) are related to biases and can result in mishaps (e.g., Halpern, 1989; Turner, 1976). This prior work, however, is silent on organizational speed, which can motivate the use of heuristics and be a centerpiece in understanding mishaps.

The purpose of this paper is to address this research gap by empirically examining the effect of organizational speed on firms' mishaps. We rely on a cognitive perspective of mishaps and argue that organizational speed can take managers' cognitive limitations to the limit and accentuate the use of heuristics. As a result, the potential for biases and, in turn, for mishaps could increase. In addition, we suggest that in dynamic environments, managers would rely on heuristics even more heavily because of the unusual time pressure that managers face in these contexts.

In this study, we examined speed at the organizational level of analysis in relation to two strategic processes: mergers and acquisitions (hereafter referred to as M&As) and strategic alliances. We focus on organizational mishaps related to social aspects. We tested our hypotheses on a sample of 331 companies included in 500 S&P

for the period 2003-2009. Our findings show that organizational speed is positively related to organizational social mishaps. Furthermore, the positive effect of strategic alliances on mishaps is stronger in dynamic environments.

This paper makes several contributions. First, our study represents a further step in the identification of the causes of organizational mishaps. Some studies have relied upon aspects of time in connection with mishaps. For example, Salter (2013) argued that there is a positive relationship between CEO short-term incentives and financial misrepresentation. Greening and Johnson (1996) found that firms' acquisition activity was linked to more crises, and CEO turnover helped firms deflect organizational crises. However, the specific notion of organizational speed, which could be a keystone for explaining mishaps, has not been articulated. In addition, most studies on organizational mishaps are theoretical or based on a comparison of case studies. Case studies are insightful, but the generalization of their conclusions is difficult. Our quantitative analysis represents an important step forward in identifying speed as a corporate-level determinant of firms' mishaps and in providing quantitative evidence for a larger sample of companies that also belong to a wide variety of industries. Studying a range of industries also allowed us to identify industry dynamism as one of the factors that strengthens the effect of speed on mishaps. Furthermore, in contrast with previous studies that focus on certain mishaps, we examine a wide range of organizational social mishaps related to corporate governance, community, diversity, employees, the natural environment, human rights, and product issues.

Second, our findings add to the incipient stream of research that highlights the potential pervasive effects of speed. We attempt to understand the effect of speed on organizational outcomes that are different from financial performance and from organizational survival, which has been the focus of prior work.

## 3.2 Theoretical Background

### 3.2.1 The Managerial Cognitive Perspective

From the managerial cognitive perspective, managers are considered information workers (Walsh, 1995). "They spend their time absorbing, processing, and disseminating information about issues, opportunities, and problems" (Walsh, 1995: 280). Information processing allows managers to interpret their environments and to enable corporate strategy formulation and implementation accordingly.

From this perspective, managers' interpretation of their environment is influenced by cognitive limitations and heuristics. One of these cognitive limitations is the limited capacity to process information (Simon, 1976; Miller, 1956). "Because of the limits of human intellective capacities in comparison with the complexities of the problems that individuals and organizations face, rational behavior calls for simplified models" (March & Simon, 1993: 190). Those simplified models are heuristics that consist of simplifying strategies or rules of thumb that help managers process information and make faster decisions (Bazerman, 2006; Schwenk, 1996). Some examples of heuristics include knowledge structures (Walsh, 1995) and the less careful consideration of alternatives (Benson & Beach, 1996).

Although managers are supposed to be sophisticated information processors, they also rely on certain types of heuristics because their information-processing demands are greater and their decisions much more complex. Many times, those efficient shortcuts in processing information lead to efficient decisions (e.g., Bingham, Eisenhardt, & Furr, 2007). Other times, however, such shortcuts can lead to cognitive biases (Tversky, & Kahneman, 1974). Cognitive biases are the inappropriate application of a heuristic to a situation when making a decision (Bazerman, 2006). Previous studies

have examined how some organizational biases can result in dysfunctional decisions and even in organizational mishaps (e.g., Halpern, 1989; Tuner, 1976). We next review the determinants of organizational mishaps that have been related to cognitive limitations, heuristics, and biases.

### 3.2.2 Prior Research on the Determinants of Organizational Mishaps from a Cognitive Perspective

In this paper, we define organizational mishaps as organizationally induced events that can threaten the viability of organizations (Pearson & Clair, 1998). We use the term mishaps to include events that have been previously studied as organizational crises or corporate illegality. Most prior work on organizational crises has primarily focused on crisis management (e.g., Antonacopoulou & Sheaffer, 2014; Lin et al., 2006; Pearson, 2010; Pearson & Clair, 1998; Sheaffer & Mano-Negrin, 2003; Shrivastava, 1993; Smart & Vertinsky, 1977). Some research on corporate illegality has assumed that corrupt behavior is intentional (Baucus & Near, 1991; Harris & Bromiley, 2007; Mckendall & Wagner, 1997). Using the umbrella term organizational mishaps, we aim to go beyond these assumptions and focus on a wide range of social mishaps that can fall into any of these categories.

Examples of mishaps include deceptive advertising (e.g., Szwajkowski, 1985), violations of environmental laws (e.g., Mckendall & Wagner, 1997), product recalls and boycotts (e.g., Pearson & Clair, 1998), product tampering (e.g., Greening & Johnson, 1996), and financial misrepresentation (e.g., Harris & Bromiley, 2007). These events can result in a loss of profit, injuries, damage, deterioration of the reputation and image, or even loss of life (Greening & Johnson, 1996). Because we focus on mishaps that are organizationally induced, financial crises and crisis situations caused by earthquakes,

floods, hurricanes, tsunamis, and other natural disasters are beyond the scope of this paper. We next provide an overview of the determinants of organizational crises and corporate illegality from a cognitive perspective.

Prior research on organizational crises has identified cognitive processes and limits as one of the determinants of these crises. For example, Halpern (1989) illustrated a series of cognitive biases that can create errors in decision making; such biases led to a catastrophe in an aircraft carrier of high reliability, the U.S. Navy. Weick (1988, 1989) analyzed the role of sense making and mental models in generating a crisis. He illustrated that commitment, cognitive capability, and expectations adversely affect crisis sense making and the severity of a crisis.

Other researchers have linked shortcomings in the ability to process information to crises and organizational decline (e.g., Turner, 1976; Weitzel & Jonsson 1989). For example, Turner (1976) illustrated how difficulties in handling and grasping disjunct information were precursors of a major disaster in the village of Aberfan, in Wales. In 1966, a colliery tip on a mountainside slid down into the village, engulfing a school and killing people. Although information about the procedures to stabilize tips had been available for many years and there was a document anticipating the causes of the disaster, such information was available only to a small group of engineers. Turner reported that disagreements about the state of the tip and the nature of earlier slips impeded people from seeing the potential danger. Another disaster examined by Turner was the accident between a large road transporter and an express train at Hixon Level Crossing in 1968. In this case, information about the operation of a new automatic rail crossing was widely available. However, individuals in the British Rail department failed to "bring together creatively the information they all had, or had access to, in a way that would have make clear the danger of the new crossings to a long slow-moving

vehicle that was in the middle of an automatic half-barrier crossing when it began to close" (Turner 1976: 386). Weitzel and Jonsson (1989) also looked at the role of information processing in their conceptual framework of organizational decline. The authors showed that because of cognitive biases, leaders did not interpret information that was available and took inappropriate action that led the organization to a crisis.

Cognitive shortcomings and corporate illegality have also been associated with each other. For example, Mishina et al. (2010) argued that biases such as loss aversion predicted illegal corporate behavior. Other studies have shown that cognitive biases and limitations can shape top management team (TMT) decision making and act as the mechanisms that lead TMTs to engage in illegal actions and/or create the conditions for organizational members to act illegally (e.g., Carpenter, Pollock, & Leary, 2003; Chatterjee & Hambrick, 2007).

The above review provides evidence for the role of managers' cognitive limitations and biases as determinants of organizational mishaps. We next argue that organizational speed can take managers' limitations to the limit and accentuate the use of heuristics. As a result, the potential for biases and, in turn, for mishaps could increase.

## 3.3 Hypotheses

### 3.3.1 The Relationship between Organizational Speed and Organizational Mishaps

Organizational speed refers to "the frequency (number) of activities in some unit of social time" (Bluedorn, 2002: 104). The number of strategic renewal actions (Volberda et al., 2001) and the number of foreign expansions (Vermeulen & Barkema, 2002) are some aspects of speed that have been examined in previous studies. Speed can

take to the limit managers' ability to process information because it results in information overload and time pressure. To process large amounts of information on time, managers may be forced to rely heavily on heuristics that can lead to cognitive biases and, in turn, increase the likelihood of organizational mishaps. In this study, we focus on two fronts of organizational speed related to firms' strategic processes: M&As and alliances. We argue that organizational speed can contribute to organizational mishaps. We will first establish the link between speed, information overload and mishaps, and then, we will connect time pressure with mishaps.

Organizational speed results in information overload because of the quick succession of M&As and strategic alliances over a period of time. Such quick flow of strategic processes entails that the time to make decisions associated with M&As and alliances is necessarily and inevitably compressed. For example, the acquisition of a company includes many interdependent and complex subprocesses, such as selecting potential targets, exercising due diligence, entering into negotiations, considering financing, and making efforts to integrate (Hitt et al., 2001). Similarly, in the initialization stage of a strategic alliance, firms must negotiate the conditions of the agreement, set the short- and long-term goals, allocate accountability and responsibility, decide on the methods of cooperation and the experience-sharing mechanisms, and prepare the documentation associated with the alliance (Chao, 2011). All subprocesses related to M&As and alliances result in a substantial amount of information. Managers spend their time absorbing, processing, and analyzing that information to detect opportunities and problems and to make profitable decisions. Therefore, M&As and alliances following each other too rapidly can result in an enormous overflow of information. That magnitude of information is enlarged even if there are temporal overlaps between several mergers, acquisitions and alliances. A wide range of

information can increase the accuracy of managers' decisions. However, managers' information-processing capacity can also be exceeded because of information overload. Information overload occurs when "managers are confronted with more information than they can process at a given time" (Baron, 1998: 278).

To facilitate fast information processing, managers use heuristics such as knowledge structures. A knowledge structure is a "mental template that individuals impose on an information environment to give it form and meaning" (Walsh, 1995: 281). These structures can help process information quickly, but they can also limit managers' ability to understand that information accurately. Knowledge structures can be related to liabilities such as stereotype thinking, the ignorance of discrepant and potentially important information, and the inhibition of creative problem solving (Gioia, 1986). Halpern (1989) illustrated how the use of knowledge structures resulted in adverse outcomes by examining the grounding of a US naval carrier. He reported that the captain of the carrier was not able to identify that a flashing red light was signalling hazard because according to his mental map, the hazard of a shoal was well behind them. This misrepresentation of the signal was one of the main reasons that led to the grounding mishap. Thus, organizations that move very fast, through M&As and strategic alliances, may also rely on knowledge structures and increase their potential for biases and subsequent organizational mishaps.

Organizational speed also results in time pressure, which captures the urgency and time constraints associated with fast action. Time pressure can also motivate the use of heuristics, such as the examination of fewer alternatives, the less careful consideration of alternatives, or the simplification of decisions strategies to save time in making decisions (McGrath & Franziska, 2004). Although these heuristics may indeed be highly efficient in saving time, they also increase the probabilities of disregarding

pieces of information (McGrath & Franziska, 2004) that may be crucial to avoiding organizational mishaps. We argue that ignoring key information because of time constraints, derived from a quick succession of M&As and alliances, can result in misinterpreting the environment and in inappropriate decisions that lead to mishaps.

Turner (1976) also offers an example that illustrates how time pressure impeded the consideration of important information and was one of the reasons that led to a major disaster. He analyzed the causes of the fire of a holiday leisure complex at Douglas, Isles of Man, in August, 1973, which killed 50 of the approximately 3000 people inside. The leisure centre incorporated new types of construction materials and was built under time pressure because the second phase had to be completed in time for the tourist season. Turner (1976) reported that information about not using combustible materials was available, but *"work was being pushed ahead in a state of intense activity"* (1976: 390) and *"information was neglected because of pressure of work"* (1976: 392).

Weitzel and Jonsson (1989) also paid attention to the role of time pressure in organizational decline. They argued that in the third stage of their model of organizational decline, organizations are vulnerable to cognitive biases. These cognitive biases derive from the tendency to centralize decision making and to seek information from fewer sources, partly due to time pressure. Thus, information processing is impaired, and organizational leaders pay little attention to warnings from subordinates, which leads to the disagreements and faulty action that precipitate a crisis. Organizations that are more prone to maladaptive decisions at this stage are fast-growing organizations because they have the tendency to act impulsively and can easily make a series of careless decisions (Weitzel & Jonsson, 1989).

In keeping with this argument, Perlow et al. (2002) analyzed how the decision-making process of Notes.com, an Internet start-up that provided lecture notes for college courses through a website, was strongly influenced by the firm's sense of urgency to move quickly. Perlow and colleagues (2002) showed that in decisions such as choosing alliance partners or hiring employees, managers favored rapid decisions at the expense of making the right decisions by gathering additional sources of information and assessing other alternatives. This emphasis on speed over content led the company to experience problems with the firm's website. Similarly, organizations that are involved in a fast sequence of M&As and alliances could rely on heuristics that favour speed over content to economize time in making decisions but could, in turn, result in organizational mishaps.

Therefore, because of information overload, the time pressure derived from speed, and managers' cognitive limits, firms that engage in a rapid succession of M&As and alliances could rely heavily on heuristics, leading the company to experience organizational mishaps.

According to this reasoning, we suggest the following hypotheses:

***Hypothesis 1a:*** *Firms that have a higher number of M&As will experience more organizational mishaps than firms that have a lower number of M&As.*

***Hypothesis 1b:*** *Firms that have a higher number of strategic alliances will experience more organizational mishaps than firms that have a lower number of strategic alliances.*

### 3.3.2 The Moderating Role of Industry Dynamism in the Relationship between Speed and Mishaps

Industry dynamism is defined as the rate and unpredictability of change in the environmental context (Dess & Bear, 1984; Simerly & Li, 2000; Wang & Li, 2008). Dynamic environments, also called "high-velocity" environments (e.g., Eisenhardt, 1989), are characterized by unpredictable, nonlinear, and rapid changes in technologies, competitors, markets, and customer needs. In these contexts, successful business models are ambiguous, and the overall industry structure is unclear (Eisenhardt & Martin, 2000).

One of the major challenges for managers is determining how to cope with fast-changing environments. Previous studies have related these environments to a firm's propensity to engage in corrupt behavior (e.g., Baucus, 1994; Baucus & Near, 1991). Baucus (1994) argued that in these environments, organization members must make up the rules as they go along. Because few rules or procedures exist in these contexts, firms may have more opportunities to behave illegally as an unintended outcome of the firm's efforts to gain a competitive advantage. Baucus and Near (1991) empirically showed that in highly dynamic, as opposed to stable, environments, firms were 51 percent more likely to behave illegally. In particular, antitrust violations were more likely as the level of dynamism increased.

In dynamic environments, managers also face major challenges in terms of time pressure. Based on limited and possibly conflicting information about competitors, managers have to make decisions quickly to stay ahead of the competition and to ensure the firm's survival (DeCelles & Pfarrer, 2004). In these environments, firms' own speed may magnify the perception of time pressure to move quickly and exacerbate the use of heuristics that result in biases and eventually in organizational mishaps.

Perlow et al.'s (2002) ethnographic study of Notes.com, mentioned above, also illustrates how the need for speed can arise endogenously in dynamic environments. The managers' speed in decision making helped the organization reach its initial market goals. However, as the managers' aspirations and expectations increased, so did their commitments and their inability to achieve goals under time constraints. As a result, more speed contributed to bad decisions, which encouraged the firm to seek greater speed to compensate for the mistakes. Notes.com became caught in a "speed trap"– a pathology created by the firm's past focus on speed. Faster decisions enabled faster growth, and in turn, organizational mishaps emerged: The quality of the notes was questioned in a newspaper, some university faculty threatened to sue the company because of copyright infringement, and a number of universities banned the use of Notes.com's services. Notes.com's perceived pressure for fast action not only emerged from the Internet's dynamic environment but also was enlarged endogenously by the dynamics between the firm's own decision speed and the evolving context (Perlow et al., 2002). As a result of the unusual and disproportionately high levels of time pressure to move quickly in the pursuit of growth, Notes.com eventually bankrupted.

In moderately dynamic environments, change is also frequent, but it is roughly predictable and linear (Eisenhardt & Martin, 2000). In these contexts, managers also experience time pressure and try to anticipate competitors' movements to gain competitive advantage. However, because the structure of the industry is clear and competitors, customers and other key players are well known (Eisenhardt & Martin, 2000), managers may experience fewer information-processing burdens and less time pressure in stable than in dynamic environments, even though firms' speed may be high. Therefore, we suggest that firms that are involved in a high number of M&As and

strategic alliances will be particularly vulnerable to experiencing mishaps in dynamic environments.

> ***Hypothesis 2a:*** *Industry dynamism moderates the relationship between the number of M&As and organizational mishaps: The relationship is more positive for firms that belong to industries with a high level of industry dynamism.*

> ***Hypothesis 2b:*** *Industry dynamism moderates the relationship between the number of strategic alliances and organizational mishaps: The relationship is more positive for firms that belong to industries with a high level of industry dynamism.*

## 3.4 Methods

### 3.4.1 Sample

Our initial sample included the public companies listed in Standard and Poor's 500 in the year 2003. The choice of our sample was dictated by how we measured the dependent variable. To measure organizational mishaps, we used KLD Research & Analytics, Inc. (hereafter referred as KLD), which has systematically rated the corporate social performance of companies included in S&P 500. Furthermore, because of the data availability over the research period 2003-2009, our final sample consisted of a balanced panel of 331 companies and 2317 firm-year observations.

### 3.4.2 Measures

#### Dependent variable

*Organizational mishaps.* We used the KLD database to measure organizational mishaps. KLD provides ratings for companies on social corporate behavior in seven major categories: (1) community, (2) diversity, (3) employee relations, (4) natural environment, (5) human rights, (6) product and (7) corporate governance. Each of these categories includes a set of "strengths" and "concerns" ratings. Ratings rely on a binary measure. If the company has a "strength" or a "concern" in one specific issue, it is indicated with one or zero, respectively.

KLD "is the largest multidimensional corporate social performance database available to the public" (Deckop, Merriman, & Gupta, 2006: 334), and it has been extensively used in academic research (e.g., Chatterji, Levine, & Toffel, 2009; Graves & Waddock, 1994; Manner, 2010). Many studies have used KLD as a measure of corporate social performance (CSP) using a net KLD score, that is, subtracting concerns from strengths (e.g., Graves & Waddock, 1994; Griffin & Mahon, 1997; Sharfman, 1996; Waddock & Graves, 1997; Waldman, Siegel, & Javidan 2006). Other studies have used strengths and/or concerns separately (e.g., Chatterji, Levine, & Toffel, 2009; Cho & Patten, 2007; Manner, 2010). Consistently with this literature, we used the sum of KLD concerns as a proxy for organizational mishaps. We included only those categories of concerns that could be considered mishaps according to our definition and that were present in KLD for the entire research period. (See Appendix for a detailed description of the concerns that we considered in each of the seven KLD categories.)

**Hypotheses-testing variables**

In this study, we focused on organizational speed by looking at firms' M&As and strategic alliances. We collected data on M&As and alliances from Thomson Financial's SDC Platinum database (hereafter referred as SDC). SDC collects data from the U.S. Securities and Exchange Commission (SEC) filings (and their international counterparts), trade publications, wires, and news sources. Although this database has some limitations, it is considered the most comprehensive data source for M&As and strategic alliances, and it has been extensively used in previous studies (e.g., Annad & Khanna, 2000; Li et al., 2012; Sampson, 2005; Tong & Li, 2011).

We used the total number of M&As and of alliances in which each firm was involved. This measure of speed matches our definition of speed and is consistent with previous literature. For example, Volberda et al. (2001) measured speed as the number of strategic renewal actions, and Vermeulen and Barkema (2002) measured it as the number of foreign expansions that a firm undertook in a given period

*M&As.* We counted every M&A in which each company of our sample was an acquirer at the time of the announcement. We included those M&As whose status in SDC was defined as *completed, intended, pending* (i.e., the transaction has been announced but has not been completed or withdrawn), or *withdrawn* (i.e., the target or acquirer in the transaction has terminated its agreement, letter of intent, or plans for the acquisition or merger) in the year of observation. We excluded M&As under the status of *rumor* or *discounted rumor* and those for which the status was *unknown* according to SDC. In the literature on M&As, some studies were restricted to transactions that were completed (e.g., Dorata, 2012; Galasso & Simcoe, 2011). This criterion, however, would have deviated us from our research purposes. Our arguments that relate

organizational speed and mishaps rely on the use of heuristics because of the information overload and time pressure that are derived from speed. In the months following an announcement, chief executive officers must make many key operational decisions and justify timely their strategies to shareholders, boards and the investment community (Fubini, 2000). Therefore, we assumed that a company starts to experience the challenges of managing information and time constraints starring on the date of the announcement of a M&A, regardless of whether such a transaction is eventually completed. We lagged this variable by one year.

*Strategic alliances.* Alliances are enduring agreements between two or more firms involving the exchange, sharing or co-development of products, technologies, and services (Chao, 2011). The number of firms' strategic alliances was also counted at the time of the announcement. Following the same criterion that we used for M&As, we included only alliances under the status *completed/signed*, *letter of intent*, *pending*, *renegotiated*, or *terminated* and excluded alliances classified as *rumor*. Our measure of strategic alliances includes domestic and international alliances, bilateral and multilateral agreements, strategic alliances that resulted in a joint venture and those that did not, research and development agreements, marketing agreements, manufacturing agreements, and several other types of collaboration agreements. We did not impose any restriction. Due to the same reasons explained above for M&As, we were interested in the overall number of strategic alliances in which a company was involved, regardless the type of alliance. This measure is consistent with our theory and research purposes. This variable was lagged by one year.

*Industry dynamism.* The dynamism in an industry refers to the level of unpredicted change. To capture this level of unpredicted change, we used industry sales, as other previous studies had done (Nadkarni & Chen, 2014; Baron & Tang, 2011;

Lepak, Takeuchi & Snell, 2003). Data on industry sales were collected from the Compustat North America database and gathered according to the two-digit Standard Industrial Classification (SIC). This measure was calculated by regressing time against industry sales for the five years preceding each year in which the dependent variable was collected (Castrogiovanni, 2002; Dess & Beard, 1984; Keats & Hitt, 1988; Sharfman & Dean, 1991). To conduct each regression, the independent variable was time and was introduced as a dummy over the five preceding years. The dependent variable was industry sales. The value of dynamism was obtained by dividing the standard errors of the regression coefficients between the mean industry sales of the five preceding years. Industry dynamism in our sample ranged from 0.045 to 9.046. Higher values indicated higher levels of industry dynamism.

**Control variables**

Consistently with the literature, we controlled for firm-level variables (financial performance, firm size, and firm age) and industry differences that may influence a company's organizational mishaps. We lagged control variables by one year.

*Financial performance.* Financial performance was operationalized as return on assets (ROA) measured as net income between total assets (e.g., Johnson & Greening, 1999). Net income and total assets were extracted from the Compustat North America database.

*Firm size.* Baucus and Near (1991) and Hill et al. (1992) showed that firm size positively influenced the likelihood of illegal behavior and citations by the Environmental Protection Agency (EPA). Greening and Johnson (1996) also found statistical support, although marginal, for the effect of firm size on firm crises. We used

the logarithm of the number of employees (Nadkarni & Chen, 2014) reported annually in the Compustat North America database to control for firm size.

*Firm age.* We controlled for firm age because older firms can potentially accumulate more organizational mishaps than younger firms. We measured firm age as the number of years since incorporation (Jayaraman et al., 2000; Kotha, Zheng, & George 2011). The logarithm of firm age was used because it yielded the most normal distribution. Data of the incorporation year were collected from the Mergent Online database.

*Industry.* The industry in which the company operates may be related to firms' organizational mishaps (Baucus & Near, 1991; Greening & Johnson, 1996; Hill et al., 1992; McKendall & Wagner, 1997). For example, Baucus and Near (1991) analyzed corporate wrongdoing and found that the propensity of engaging in illegal practices was higher for companies that competed in the food, lumber, petroleum refining, and transportation equipment (automobile) industries.

We controlled for potential industry differences by identifying the industries with the highest number of organizational mishaps. To develop this measure, we followed McKendall and Wagner's (1997) approach. First, we calculated the overall mean of the number of organizational mishaps across the total number of companies in our sample. Second, we grouped the sample firms according to 2-digit SIC codes. Third, within each 2-digit industry group, we compared each member firm's number of organizational mishaps with the overall mean that was previously calculated. We found that agricultural production crops (SIC 01), metal mining (SIC 10), petroleum refining and related industries (SIC 29), transportation equipment (SIC 37), railroad transportation (SIC 40), motor freight transportation and warehousing (SIC 42), water

transportation (SIC 44), communication (SIC 48); electric, gas and sanitary services (SIC 49), food stores (SIC 54), and non-classifiable establishments (SIC 99) were the industries that accounted for the highest number of organizational mishaps for five consecutive years over our research period. Finally, we captured this information in a dummy variable called *industry* that took the value of one if the firm belonged to any of the aforementioned industries and the value of zero otherwise. Due to the wide range of industries in our sample (52 unique 2-digit SIC codes), McKendall and Wagner's approach (1997) has the advantage of controlling for possible main industry effects without dramatically reducing the number of statistical degrees of freedom.

### 3.4.3 Data Analysis

We tested our hypotheses using a moderated hierarchical regression analysis. We performed a panel-corrected standard errors (PCSE) estimation. Consistent with the characteristics of our panel, PCSE estimation assumes that disturbances are heteroskedastic and contemporaneously correlated across panels (Wooldridge, 2003). Furthermore, PCSE specification produces more robust variances and standard errors than do feasible generalized least squares models (Beck & Katz, 1995; Froot, 1989).

We estimated five models. In Model 1, we included only the control variables. In Models 2 and 3, we added the main effect of M&As and the main effect of strategic alliances, respectively. In Models 4 and 5, we tested the two-way interaction terms. We mean-centered the interaction terms to avoid multicollinearity (Cohen et al., 2003).

## 3.5 Results

Table 3.1 reports the means, standard deviations, and correlations for the variables examined in the study. Table 3.2 shows the results of the regression analysis.

We assessed potential collinearity among the variables by computing the variance inflation factors (VIFs) connected with each of the independent variables. The minimum VIF score is 1.02, and the maximum is 1.64. These values are below the recommended threshold of 5 or 10 (O'brien, 2007). These results indicate that multicollinearity was not a concern in our model.

In Table 3.2, Model 1 presents the baseline model and shows that several control variables were significant. Firm size was positively related to organizational mishaps ($\beta$=0.893; $p$<0.001). This result is consistent with prior literature (Baucus & Near, 1991; Hill et al., 1992; Greening & Johnson, 1996). Industry effects were also statistically significant ($\beta$=2.324; $p$<0.001). This result is also consistent with previous research work (e.g., Mckendall & Wagner, 1997). Firm age was also significant ($\beta$=0.096; $p$<0.01). Financial performance was not significant for our sample of companies.

Hypothesis 1a states that M&As have a positive effect on organizational mishaps. Model 2 and Model 4 shows that the coefficient of M&As is positive and statistically significant ($\beta$=0.062; $p$<0.001). Therefore, the findings offer support for hypothesis 1a.

Hypothesis 1b states that strategic alliances also have a positive effect on organizational mishaps. Model 3 and Model 5 show that the coefficient of strategic alliances is positive and statistically significant ($\beta$=0.065; $p$<0.001). This result suggests that strategic alliances are positively related to organizational mishaps. Therefore, the results support hypothesis 1b.

Hypothesis 2a states that the interaction between M&As and industry dynamism positively influences organizational mishaps. Model 4 shows that the coefficient of the interaction is not statistically significant. Hypothesis 2a is not supported by the data.

**TABLE 3.1**
**Descriptive Statistics and Correlations**

| | Mean | S.D. | Min | Max | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **1 Organizational mishaps** | 2.532 | 2.489 | 0 | 15 | | | | | | | |
| **2 Financial performance** | 0.055 | 0.105 | -2.908 | 0.503 | -0.008 | | | | | | |
| **3 Firm size** | 52.209 | 112.628 | 0.328 | 2100 | 0.407*** | 0.029 | | | | | |
| **4 Firm age** | 54.387 | 39.204 | 1 | 202 | 0.184*** | 0.092*** | 0.077*** | | | | |
| **5 Industry** | 0.16 | 0.367 | 0 | 1 | 0.382*** | -0.076*** | 0.049* | 0.007 | | | |
| **6 Industry dynamism** | 0.438 | 0.769 | 0.045 | 9.046 | 0.004 | 0.005 | 0.003 | -0.039 | -0.053** | | |
| **7 M&As** | 1.836 | 2.568 | 0 | 27 | 0.134*** | 0.077*** | 0.103*** | 0.013 | -0.126*** | -0.08*** | |
| **8 Strategic alliances** | 1.096 | 2.943 | 0 | 51 | 0.136*** | 0.051* | 0.106*** | 0.002 | -0.063** | -0.079*** | 0.399*** |

N=331. Significance levels: *$p$ <0.05 **$p$<0.01 ***$p$<0.001

**TABLE 3.2**
**Influence of Organizational Speed on Organizational Mishaps**

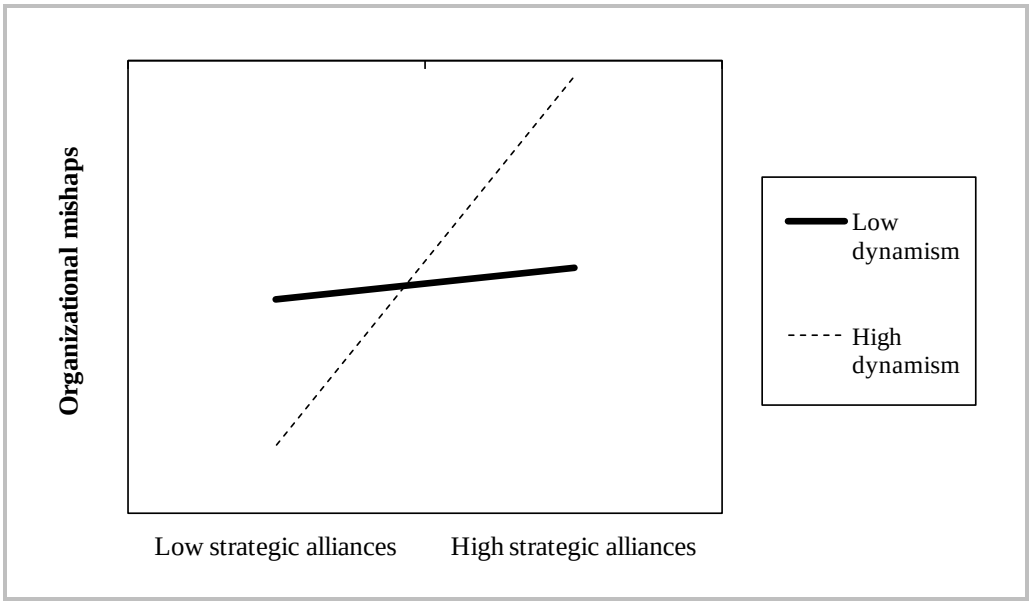
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---|---|---|---|---|
| **Control variables** | | | | | |
| Financial performance | 0.157<br>(0.312) | 0.075<br>(0.320) | 0.074<br>(0.319) | 0.075<br>(0.320) | 0.069<br>(0.324) |
| Firm size | 0.893***<br>(0.063) | 0.865***<br>(0.061) | 0.864***<br>(0.065) | 0.865***<br>(0.062) | 0.863***<br>(0.067) |
| Firm age | 0.096**<br>(0.029) | 0.108***<br>(0.030) | 0.107***<br>(0.030) | 0.108***<br>(0.030) | 0.117***<br>(0.030) |
| Industry | 2.324***<br>(0.101) | 2.386***<br>(0.105) | 2.364***<br>(0.101) | 2.384***<br>(0.103) | 2.346***<br>(0.095) |
| **Direct effects** | | | | | |
| Industry dynamism | | -0.013<br>(0.035) | -0.011<br>(0.032) | -0.005<br>(0.048) | 0.039<br>(0.029) |
| M&As | | 0.062***<br>(0.014) | | 0.064***<br>(0.016) | |
| Strategic alliances | | | 0.065***<br>(0.013) | | 0.090***<br>(0.020) |
| **Moderating effects** | | | | | |
| M&As x dynamism | | | | 0.011<br>(0.033) | |
| Strategic alliances x dynamism | | | | | 0.099*<br>(0.043) |
| Constant | -0.999***<br>(0.124) | -0.960***<br>(0.127) | -0.950***<br>(0.132) | -0.958***<br>(0.128) | -0.960***<br>(0.137) |
| R-squared | 0.368 | 0.372 | 0.373 | 0.372 | 0.375 |

N=331. Observations=2317. Robust standard errors are reported in parentheses.
Significance levels: *$p$<0.05 **$p$<0.01 ***$p$<0.001

Hypothesis 2b states that the interaction between strategic alliances and industry dynamism positively influences firm's mishaps. Model 5 shows that the coefficient of the interaction term is statistically significant ($\beta$=0.099; $p<0.05$). We plotted the interaction effect in Figure 3.1. The figure shows that the positive relationship between strategic alliances and organizational mishaps is strengthened in environments with high levels of industry dynamism. Therefore, Hypothesis 2b receives support.

**FIGURE 3.1**

**Moderated Effect of Industry Dynamism on the Relationship between Strategic Alliances and Organizational Mishaps**




## 3.6 Discussion

In the current study, we take organizational speed as the centerpiece of the research and pose two questions: What is the influence of speed on firms' organizational social mishaps? Is the relationship between speed and mishaps affected by industry dynamism? Our findings suggest that organizational speed, related to M&As and alliance processes, has a positive relationship with firms' mishaps. In

addition, industry dynamism moderates this relationship in the case of strategic alliances, so the positive relationship between alliances and mishaps is stronger in dynamic environments. We do not interpret these results as evidence that organizational speed is detrimental for firms in all circumstances. However, the positive relationship that we found between speed and mishaps highlights the fact that speed has the potential to contribute to adverse organizational social outcomes. These findings have relevant implications for research and practice, which are discussed next.

### 3.6.1 Contributions and Implications for Research

This paper makes an important contribution in identifying one of the determinants of organizational mishaps at the corporate level. Quantitative analyses identifying speed-related causes of organizational mishaps have been limited in prior research (Salter, 2013; Greening & Johnson, 1996). We found that M&As were positively related to organizational social mishaps. This result is consistent with Greening and Johnson's (1996) findings. Although these authors did not theoretically articulate the concept of speed and its implications, they found a positive relationship between the firm's level of acquisition activity and the likelihood of human-induced crises in the utility, petroleum and gas, chemical, and food-processing industries. In addition, we found a positive link between a firm's alliance activity and mishaps. Our findings are also consonant with Slawinski and Bansal's (2012) and Vermeulen and Barkema's (2002) conclusions on the negative influence of speed on firms' organizational outcomes. Slawinski and Bansal (2012) studied a set of Canadian companies in the oil and gas industry and found that firms that moved too fast took a fragmented approach to climate change, rather than seeking holistic solutions, which exposed the company to reprimands by stakeholders. In relation to a firm's

internationalization process, Vermeulen and Barkema (2002) showed that too much foreign expansion in a too-short period of time can create time-compression diseconomies.

By identifying organizational speed as a determinant of mishaps, our work suggests that organizational mishaps are avoidable. In the literature on organizational crises, some scholars have assumed that crises are unavoidable and intrinsic to the nature of high-risk technologies, which are interactively complex and tightly coupling (Perrow, 1984). Other scholars, however, have argued that organizational crises are preventable and have studied and theorized on its causes (Greening & Johnson, 1996; Shrivastava, 1993; Turner, 1976). Our findings suggest that managers can indeed prevent organizational social mishaps, and more broadly corporate social irresponsibility, by managing organizational speed properly.

Furthermore, our research investigated the moderating role of industry dynamism. We found that firms with a higher number of strategic alliances were particularly prone to experiencing social mishaps in dynamic, as opposed to stable, environments. Prior research has advocated fast organizational action in dynamic environments to remain competitive (Baum & Wally, 2003) because making decisions faster or developing new products faster than competitors gives firms first-mover advantages, such as the benefit of increases in demand (e.g., Forbes, 2005; Kessler & Chakrabarti, 1996).

However, a few recent studies have found that in the high-velocity industry of the Internet, too much organizational speed can also be detrimental for organizational survival. For example, Forbes (2005) examined 98 small Internet start-ups and found that bankruptcies were more common among companies with a high decision speed. He

suggested that the Internet firms pushed their decision-making practices to such a high speed that the potential positive performance effects of speed (e.g., being a pioneer in adopting a new technology) were suppressed because managers were not able to address issues such as technology-implementation snags or irreconcilable alliance conflicts. Perlow et al. (2002) illustrated how a start-up was caught in a "speed trap" and was eventually bankrupted. Our work contributes to this stream of research by demonstrating, in a more general context (several industries) and based on longitudinal data, that speed can contribute to organizational social mishaps even in dynamic environments.

Contrary to our expectations, we did not find evidence for a strengthening effect of industry dynamism on the relationship between M&As and mishaps. One possible reason for this result may lie in the major complexity of M&A compared to alliance agreements. M&As are complex strategic processes that involve many decisions and organizational members and require sufficient managerial time and attention to be successful. When a company is moving too fast through a number of M&As, managers' cognitive limitations can be exceeded, and the use of heuristics can potentially result in mishaps, regardless the level of industry dynamism. Another explanation for the lack of support of the predicted hypothesis could be based on a differentiated moderating effect for mergers and for acquisitions. It is possible that the moderating effect of industry dynamism would be different if a distinction between mergers and acquisitions were applied. Unfortunately, we did not have access to information to distinguish between mergers and acquisitions. Future studies in this area could test these possible differences.

### 3.6.2 Implications for Managers

This study is relevant for managers for several reasons. First, our study implies that cognitive limitations in information processing may be a key constraint for firms to benefit from non-limited speed. Managers should be recognizant of such cognitive limitations, of the use of heuristics to process information, and of the potential effect of heuristics and biases in creating mishaps. Some mechanisms have been suggested to ensure that information has been gathered from different sources and assessed objectively. Some of these mechanisms include applying different frames of reference to look at a problem, using counterfactual reasoning to imagine improbable or unpopular outcomes, considering organizational members and experts' different points of view carefully even if they are conflicting views, and using models to guide analysis (Choo, 2008).

Second, our study highlights that companies that move too fast may be vulnerable to mishaps. Although companies must respond quickly to meet changes in consumers' preferences and to other unexpected movements in their industry, they must also avoid moving too fast or too slow. Companies that move too fast can fall into a speed trap, where managers favor decision speed at the expense of decision content (Perlow et al., 2002). Moving too slowly can also be detrimental and lead companies to a slow trap, where the quality of content is emphasized at the expense of speed, and slowly planned decisions are continuously reinforced (Perlow et al., 2002). Companies that spend too much time thinking about decisions miss opportunities (Perlow et al., 2002). Altogether, companies should balance the pace of their strategic processes to avoid undesirable organizational outcomes. For example, when a mishap arises, a firm that is involved in a rapid sequence of M&As, alliances, and similar strategic processes may need to reconsider its pace to be able to examine those mishaps and thus lead the

company in the most appropriate direction. Otherwise, managers may be at risk of believing that more speed is the solution to resolving the mishap instead of viewing such mishaps as a symptom of underlying organizational problems.

### 3.6.3 Limitations and Directions for Future Research

Although this study makes an important contribution to the literature, it also has several limitations. First, our sample consists of large companies from the United States. The nature of this sample limits the extent to which our findings can be generalized to other organizations. Therefore, our results may not be applicable to medium and small firms. In addition, there are cross-cultural differences in the ways companies perceive time that are reflected in firms' behavior (Levine, West, & Reis, 1980). For example, Levine and Bartlett (1984) demonstrated that the average speed of walking and postal transactions and the accuracy of bank clocks differ across countries. Future research could benefit from exploring the relationship between speed and mishaps in a more heterogeneous sample in terms of size and a variety of countries.

Second, we measured organizational speed in relation to a firm's M&As and alliance activities. Organizational speed can also be reflected in other aspects of organizational life, such as product innovations, a firm's international activity, or speed of integration. An interesting extension of our study could examine these other facets of speed in relation to mishaps.

Third, industry dynamism represents only one aspect of an environmental context. Future research could build on our results to explore the moderating effect of other relevant industry characteristics, such as complexity or the level of rivalry in the industry. Furthermore, many organizations simultaneously face multiple environments such as when an established firm enters a new market or a new firm enters an

established market (Eisenhardt, Furr, & Bingham, 2010). It would also be interesting to examine the effect of these dynamics on mishaps.

Fourth, we based our arguments on managers' cognitive limitations, which may require them to use heuristics to handle information overload and time pressure and result in biases and eventually in organizational mishaps. However, we were not able to directly observe whether these heuristics and biases intervened in the relationship between speed and mishaps. We did not have access to that information. Future research could embrace efforts to identify different types of heuristics that may be interwoven and can result in different types of mishaps.

## 3.7 References

Anand, B. N., & Khanna, T. 2000. Do firms learn to create value? The case of alliances. ***Strategic Management Journal,*** 21: 295–315.

Antonacopoulou, E. P., & Sheaffer, Z. 2014. Learning in crisis: Rethinking the relationship between organizational learning and crisis management. ***Journal of Management Inquiry,*** 23: 5–21.

Atuahene-Gima, K. 2003. The effects of centrifugal and centripetal forces on product development speed and quality: How does problem solving matter? ***Academy of Management Journal,*** 46: 359–373.

Bansal, P. 2003. From issues to actions: The importance of individual concerns and organizational values in responding to natural environmental issues. ***Organization Science,*** 14: 510–527.

Barkema, H. G., Baum J. A., & Mannix, E. A. 2002. Management challenges in a new time. ***Academy of Management Journal,*** 45: 916–930.

Baron, R. A. 1998. Cognitive mechanisms in entrepreneurship: why and when entrepreneurs think differently than other people. ***Journal of Business Venturing,*** 13: 275–294.

Baron, R. A., & Tang, J. 2011. The role of entrepreneurs in firm-level innovation: Joint effects of positive affect, creativity, and environmental dynamism. ***Journal of Business Venturing,*** 26: 49–60.

Baucus, M. 1994. Pressure, opportunity and predisposition: A multivariate model of corporate illegality. ***Journal of Management,*** 20: 699–721.

Baucus, M. S., & Near, J. P. 1991. Can illegal corporate behavior be predicted? An event history analysis. ***Academy of Management Journal,*** 34: 9–36.

Bauer, F., & Matzler, K. 2014. Strategic complementarity, cultural fit, and degree and speed of integration. ***Strategic Management Journal,*** 35: 269–291.

Baum, J. R., & Wally, S. 2003. Strategic decision speed and firm performance**.** ***Strategic Management Journal,*** 24: 1107–1129.

Bazerman, M. H. 2006. ***Judgement in Managerial Decision Making***. New York: Wiley.

Beck, N., & Katz, J. 1995. What to do (and not to do) with time-series cross-section data. ***American Political Science Review,*** 89: 634–647.

Benson, L., & Beach, L. R. 1996. The effects of time constraints on the pre-choice screening of the decision options. ***Organizational Behavior and Human Decision Processes,*** 67: 222–228.

Bingham, C. B., Eisenhardt, K. M., & Furr, N. R. 2007. What makes a process a capability? Heuristics, strategy, and effective capture of opportunities. ***Strategic Entrepreneurship Journal,*** 27: 27–47.

Bluedorn, A. C. 2002. ***The Human Organization of Time*****.** Stanford: Stanford University Press.

Carpenter, M. A., Pollock, T. G., & Leary, M. M. 2003. Testing a model of reasoned risk-taking: Governance, the experience of principals and agents, and global strategy in high-technology IPO firms. ***Strategic Management Journal,*** 24: 803–820.

Castrogiovanni, G. J. 2002. Organization task environments: Have they changed fundamentally over time. ***Journal of Management,*** 28: 129–150.

Chao, Y. 2011. Decision-making biases in the alliance life cycle Implications for alliance failure. ***Management Decision,*** 49: 350–364.

Chatterjee, A., & Hambrick, D. C. 2007. It's all about me: Narcissistic chief executive officers and their effects on company strategy and performance. ***Administrative Science Quarterly,*** 52: 351–386.

Chatterji, A. K., Levine, D. I., & Toffel, M. W. 2009. How well do social ratings actually measure corporate social responsibility? ***Journal of Economics & Management Strategy,*** 18: 125–169.

Cho, C. H., & Patten, D. M. 2007. The role of environmental disclosures as tools of legitimacy: A research note. ***Accounting, Organizations and Society,*** 32: 639–647.

Choo, C. W. 2008. Emerald Article: Organizational disasters: why they happen and how they may be prevented. ***Management Decision,*** 47: 32–45.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. 2003. ***Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences.*** Mahwah, NJ: Erlbaum.

DeCelles, K. A., & Pfarrer, M. D. 2004. Heroes or villains? Corruption and the charismatic leader. ***Journal of Leadership & Organizational Studies,*** 11: 67–77.

Deckop, J., Merriman, K., & Gupta, S. 2006. The effects of CEO pay structure on corporate social performance. ***Journal of Management,*** 32: 329–342.

Dess, G. G., & Beard, D. W. 1984. Dimensions of organizational task environments. ***Administrative Science Quarterly,*** 29: 52–73.

Dorata, N. T. 2012. Determinants of the strengths and weaknesses of acquiring firms in mergers and acquisitions: A stakeholder perspective. ***International Journal of Management,*** 29: 578–590.

Eisenhardt, K. M. 1989. Building theories from case study research. ***Academy of Management Review,*** 14: 532–550.

Eisenhardt, K. M., & Martin, J. A. 2000. Dynamic capabilities: What are they? ***Strategic Management Journal,*** 21: 1105–1121.

Forbes, D. P. 2005. Managerial determinants of decision speed in new ventures. ***Strategic Management Journal,*** 26: 355–366.

Froot, K. 1989. Consistent covariance matrix estimation with cross-sectional dependence and heteroskedasticity in financial data. ***Journal of Financial and Quantitative Analysis,*** 24: 333–355.

Fubini, D. 2000. After the merger. ***The McKinsey Quarterly,*** 4: 4–5.

Galasso, A., & Simcoe, T. S. 2011. CEO overconfidence and innovation. ***Management Science,*** 57: 1469–1484.

Gioia, D. A. 1986. ***Conclusion: The State of the Art in Organizational Social Cognition: A Personal View.*** In H. P. Sims and D. A. Gioia (Eds.), The Thinking Organization: Dynamics of Organizational Social Cognition. San Francisco: Jossey-Bass.

Graves, S., & Waddock, S. A. 1994. Institutional owners and corporate social performance. ***Academy of Management Journal,*** 37: 1034–1046.

Greening, D. W., & Johnson, R. A. 1996. Do managers and strategies matter? A study in crisis. ***Journal of Management Studies,*** 33: 25–51.

Griffin, J. J., & Mahon, J. F. 1997. The corporate social performance and corporate financial performance debate; twenty-five years of incomparable results. ***Business & Society,*** 36: 5–31.

Halpern, J. J. 1989. Cognitive factors influencing decision making in a highly reliable organization. ***Organization & Environment,*** 3: 143–158.

Harris, J., & Bromiley, P. 2007. Incentives to cheat: The influence of executive compensation and firm performance on financial misrepresentation. ***Organization Science,*** 18: 350–367.

Hill, C. W. L., Kelley, P. C., Agle, B. R., Hitt, M. A., & Hoskisson, R. E. 1992. An empirical examination of the causes of corporate wrongdoing in the United States. ***Human Relations,*** 45: 1055–1076.

Hitt, M. A., Harrison, J. S., & Ireland, R. D. 2001. ***Mergers and Acquisitions. A Guide to Creating Value for Stakeholders*****.** New York: Oxford University Press.

Homburg, C., & Bucerius, M. 2006. Is speed of integration really a success factor of mergers and acquisitions? An analysis of the role of internal and external relatedness. ***Strategic Management Journal,*** 27: 347–367.

Jayaraman, N., Khorana, A., Nelling, E., & Covin, J. 2000. CEO founder status and firm financial performance. ***Strategic Management Journal,*** 21: 1215–1224.

Johnson R. A., & Greening, E. W. 1999**.** The effects of corporate governance and institutional ownership types on corporate social performance. ***Academy of Management Journal,*** 42: 564–576.

Judge, W. Q., & Miller, A. 1991. Antecedents and outcomes of decision speed in different environmental. ***Academy of Management Journal,*** 34: 449–463.

Keats, B. W., & Hitt, M. A. 1988. A causal model of linkages among environmental dimensions, macro organizational characteristics, and performance. ***Academy of Management Journal,*** 31: 570–598.

Kessler, E. H., & Chakrabarti, A. K. 1996. Innovation speed: A conceptual model of context, antecedents, and outcomes. ***Academy of Management Review,*** 21: 1143–1191.

Kotha, R., Zheng, A., & George, G. 2011. Research notes and commentaries entry into new niches: The effects of firm age and the expansion of technological capabilities on innovative output and impact. ***Strategic Management Journal,*** 32: 1011–1024.

Kownatzki, M., Walter, J., Floyd, S. W., & Lechner, C. 2013. Corporate control and the speed of strategic business unit decision making. ***Academy of Management Journal,*** 56: 1295–1324.

Lepak, D. P., Takeuchi, R., & Snell, S. A. 2003. Employment flexibility and firm performance: examining the interaction effects of employment mode, environmental dynamism, and technological intensity. ***Journal of Management,*** 29: 681–703.

Levine, R. V., & Bartlett, K. 1984. Pace of life, punctuality and coronary heart disease in six countries. ***Journal of Cross-Cultural Psychology,*** 15: 23–255.

Levine, R. V., West, L., & Reis, H. 1980. Perceptions of time and punctuality in the United States and Brazil. ***Journal of Personality and Social Psychology,*** 38: 541–550.

Li, D., Eden, L., Hitt, M. A., Ireland, R. D., & Garrett, R. P. 2012. Governance in multilateral R&D alliances. ***Organization Science,*** 23: 1191–1210.

Lin, Z., Zhao, X., Ismail, K. M., & Carley, K. M. 2006. Organizational design and restructuring in response to crises: Lessons from computational modeling and real-world cases. ***Organization Science,*** 17: 598–675.

Manner, M. H. 2010. The Impact of CEO Characteristics on corporate social performance. ***Journal of Business Ethics,*** 93:53–72.

March, H., & Simon, H. 1993. ***Organizations*** (2nd ed.). Cambridge: Blackwell Publishers.

Más-Ruiz, F. J., Nicolau-Gonzálbez, J. L., & Ruiz-Moreno, F. 2005. Asymmetric rivalry between strategic groups: Response, speed of response and ex ante vs. ex post competitive interaction in the Spanish bank deposit market. ***Strategic Management Journal,*** 26: 713–745

McCall, M. W., & Kaplan, R. E. 1985. ***Whatever It Takes: Decision Makers at Work.*** Englewood Cliffs, NJ: Prentice-Hall, Inc.

McGrath, J. E., & Franziska, T. 2004. ***Temporal Matters in Social Psychology: Examining the Role of Time in the Lives of Groups and Individuals.*** Washington, DC: American Psychological Association.

McKendall, M. A., & Wagner, J. A. 1997. Motive, opportunity, choice, and corporate illegality. ***Organization Science,*** 8: 624–647.

Miller, G. A. 1956. The magic number seven plus or minus two: Some limits on our capacity for processing information. ***Psychological Review,*** 64: 81–97.

Mishina, Y., Dykes, B. J., Block, E. S., & Pollock, T. G. 2010. Why "good" firms do bad things: the effects of high aspirations, high expectations, and prominence on the incidence of corporate illegality. ***Academy of Management Journal,*** 53: 701–722.

Nadkarni, S., & Chen, J. 2014. Bridging yesterday, today, and tomorrow: CEO. Temporal focus, environmental dynamism, and rate of new product introduction. ***Academy of Management Journal,*** 57: 1810–1833.

O'Brien, R. M. 2007. A Caution regarding rules of thumb for variance inflation factors. ***Quality & Quantity,*** 41: 673–690.

Pearson, C. M. 2010. Dawn R. Gilpin and Priscilla J. Murphy: Crisis management in a complex world. ***Administrative Science Quarterly,*** 55: 170–171.

Pearson, C. M., & Clair, J. A. 1998. Reframing crises management. ***Academy of Management Review,*** 23: 59–76.

Perlow, L. A., Okhuysen, G. A., & Repenning, N. P. 2002. The speed trap: Exploring the relationship between decision making and temporal context. ***Academy of Management Journal,*** 45: 931–955.

Perrow, C. 1984. ***Normal Accidents: Living with High-Risk Technologies.*** New York: Basic Books.

Salter, M. S. 2013. Short-termism at its worst: How short-termism invites corruption... And what to do about it? ***Edmond J. Safra Research Lab Working Papers,*** 5: 1–70.

Sampson, R. C. 2005. Experience effects and collaborative returns in R&D alliances. ***Strategic Management Journal,*** 26: 1009–1031.

Schwenk, C. H. 1996. Information, cognitive biases, and commitment to a course of action. ***Academy of Management Review,*** 11: 298–310.

Sharfman, M. 1996. The construct validity of the Kinder, Lydenberg & Domini Social performance ratings data. ***Journal of Business Ethics,*** 15: 287–296.

Sharfman, M., & Dean, J. 1991. Conceptualizing and measuring the organizational environment: A multi-dimensional approach. ***Journal of Management,*** 17: 681–700.

Sheaffer, Z., & Mano-Negrin, R. 2003. Executives' orientations as indicators of crisis management policies and practices. ***Journal of Management Studies,*** 40: 573–606.

Shrivastava, P. 1993. Crisis theory/practice: Towards a sustainable future. ***Organization & Environment,*** 7: 23–42.

Simerly, R. L., & Li, M. 2000. Environmental dynamism, capital structure and performance: A theoretical integration and an empirical test. ***Strategic Management Journal,*** 21: 31–50.

Simon, H. A. 1976. ***Administrative Behavior.*** New York: Macmillan.

Slawinski, N., & Bansal, P. 2012. A matter of time: the temporal perspectives of organizational responses to climate change. ***Organization Studies,*** 33: 1537–1563.

Smart, C., & Vertinsky, I. 1977. Designs for crisis decision. ***Administrative Science Quarterly,*** 22: 640–657.

Szwajkowski, E. 1985. Organizational Illegality: Theoretical integration and illustrative application. ***Academy of Management Review,*** 10: 358–367.

Tong, T. W., & Li, Y. 2011. Real options and investment mode: Evidence from corporate venture capital and acquisition. ***Organization Science,*** 22: 659–674.

Turner, B. A. 1976. The Organizational and interorganizational development of disasters. ***Administrative Science Quarterly,*** 21: 378–397.

Tversky, A., & Kahneman, D. 1974. Judgment under uncertainty: Heuristics and biases. ***Science,*** 185: 1124–1131.

Vermeulen, F., & Barkema, H. 2002. Pace, rhythm, and scope: process dependence in building a profitable multinational corporation. ***Strategic Management Journal,*** 23: 637–653.

Volberda, H. W., Van den Bosch, F. A. J., Flier, B., & Gedajlovic, E. R. 2001. Following the herd or not? Patterns of renewal in the Netherlands and the UK. ***Long Range Planning,*** 34: 209–229.

Waddock, S. A., & Graves, S. B. 1997. The corporate social performance financial performance link. ***Strategic Management Journal,*** 18: 303–319.

Waldman, D. A., Siegel, D. S., & Javidan, M. 2006. Components of CEO transformational leadership and corporate social responsibility. ***Journal of Management Studies,*** 43: 1703–1725.

Walsh, J. P. 1995. Managerial and organizational cognition: notes from a trip down memory lane. ***Organization Science,*** 6: 280–321.

Wang, H., & Li, J. 2008. Untangling the effects of overexploration and overexploitation on organizational performance: The moderating role of environmental dynamism. ***Journal of Management,*** 34: 925–951.

Weick, K. E. 1988. Enacted sensemaking in crisis situations. ***Journal of Management Studies,*** 25: 305–317.

Weick, K. E. 1989. Mental models of high reliability systems. ***Industrial Crisis Quarterly,*** 3: 127–142.

Weitzel, W., & Jonsson, E. 1989. Decline in organizations: A literature integration and extension. ***Administrative Science Quarterly,*** 34: 91–109.

Wooldridge, J. M. 2003. ***Introductory Econometrics: A Modern Approach*** (2nd ed.). Mason, Ohio: South-Western.

## 3.8 Appendix. Description of KLD Areas of Concerns

| **1. Corporate Government** |
|---|
| **1a Ownership Concern**. The company owns between 20% and 50% of a company KLD has cited as having an area of social concern, or is more than 20% owned by a firm KLD has rated as having areas of concern. When a company owns more than 50% of another firm, it has a controlling interest, and KLD treats the second firm as if it is a division of the first. |
| **1b Other Concerns.** The company is involved with a controversy not covered by KLD's other corporate governance ratings. |
| **2. Community** |
| **2a Investments Controversies.** The company is a financial institution whose lending or investment practices have led to controversies, particularly ones related to the Community Reinvestment Act. |
| **2b Negative Economic Impact.** The company's actions have resulted in major controversies concerning its economic impact on the community. These controversies can include issues related to environmental contamination, water rights disputes, plant closings, "put-or-pay" contracts with trash incinerators, or other company actions that adversely affect the quality of life, tax base, or property values in the community. |
| **2c Indigenous Peoples Relations.** The company has been involved in serious controversies with indigenous peoples that indicate the company has not respected the sovereignty, land, culture, human rights, and intellectual property of indigenous peoples. |
| **2d Other Concerns.** The company is involved with a controversy that has mobilized community opposition, or is engaged in other noteworthy community controversies. |
| **3. Diversity** |
| **3a Controversies.** The company has either paid substantial fines or civil penalties as a result of affirmative action controversies, or has otherwise been involved in major controversies related to affirmative action issues. |
| **3b Other concerns.** The company is involved in diversity controversies not covered by other KLD ratings. |
| **4. Employees** |
| **4a Union Relations.** The company has a history of notably poor union relations. KLD renamed this concern from Poor Union Relations. |
| **4b Health and Safety Concern**. The company recently has either paid substantial fines or civil penalties for wilful violations of employee health and safety standards, or has been otherwise involved in major health and safety controversies. |
| **4c Other Concerns.** The company is involved in an employee relations controversy that is not covered by other KLD ratings. |
| **5. Environment** |
| **5a Hazardous Waste.** The company's liabilities for hazardous waste sites exceed $50 million, or the company has recently paid substantial fines or civil penalties for waste management violations. |
| **5b Regulatory Problems.** The company has recently paid substantial fines or civil penalties for violations of air, water, or other environmental regulations, or it has a pattern of regulatory controversies under the Clean Air Act, Clean Water Act or other major environmental regulations. |
| **5c Substantial Emissions.** The company's legal emissions of toxic chemicals (as defined by and reported to the EPA) from individual plants into the air and water are among the highest of the companies followed by KLD. |
| **5d Other Concerns.** The company has been involved in an environmental controversy that is not covered by other KLD ratings. |
| **6. Human rights** |
| **6a Labour Rights Concern.** The company's operations have had major recent controversies primarily related to labor standards in its supply chain. |
| **6b Indigenous Peoples Relations Concerns.** The company has been involved in serious controversies with indigenous peoples (either in or outside the U.S.) that indicate the company has not respected the sovereignty, land, culture, human rights, and intellectual property of indigenous peoples. |
| **6c Other Concerns.** The company's operations have been the subject of major recent human rights controversies not covered by other KLD ratings. |

## 3.8 Appendix. (Cont.) Description of KLD Areas of Concerns

| **7. Product** |
|---|
| **7a Product Safety.** The company has recently paid substantial fines or civil penalties, or is involved in major recent controversies or regulatory actions, relating to the safety of its products and services. |
| **7b Marketing/ Contracting Concern.** The company has recently been involved in major marketing or contracting controversies, or has paid substantial fines or civil penalties relating to advertising practices, consumer fraud, or government contracting. |
| **7c Antitrust.** The company has recently paid substantial fines or civil penalties for antitrust violations such as price fixing, collusion, or predatory pricing, or is involved in recent major controversies or regulatory actions relating to antitrust allegations. |
| **7d Other Concerns.** The company has major controversies with its franchises, is an electric utility with nuclear safety problems, defective product issues, or is involved in other product-related controversies not covered by other KLD ratings. |

# CAPÍTULO 4

# THE INFLUENCE OF ORGANIZATIONAL SPEED ON CORPORATE ENVIRONMENTAL PERFORMANCE

# THE INFLUENCE OF ORGANIZATIONAL SPEED ON CORPORATE ENVIRONMENTAL PERFORMANCE


## ABSTRACT

Most previous studies have taken for granted that speed is a positive attribute of a firm, primarily in relation to financial performance. Studies on the effects of speed on different outcomes, particularly on environmental issues, have been limited. We hypothesized that the relationship between organizational speed and corporate environmental performance has an inverted U-shape. Relying on a sample of 427 U.S. firms, our results support this hypothesis. We studied speed through mergers and acquisitions and strategic alliance processes and found that as the number of mergers and acquisitions and alliances increased from slight to moderate, environmental performance improved. However, as the number of mergers and acquisitions and alliances increased from moderate to great, environmental performance declined.



**Keywords**: organizational speed, corporate environmental performance, temporal myopia.

## 4.1 Introduction

In the second half of the twentieth century, human activity have changed ecosystems more rapidly and extensively than in any other period in history (Hoffman & Bansal, 2012). The corporate sector has been seen as one of the main causes (Hoffman & Bansal, 2012; Shrivastava, 1994). To attempt to reduce firms' environmental impact, prior research has investigated the determinants that affect corporate environmental performance (e.g., Etzion, 2007), which refers to the impact of a firm's processes and products on the natural environment (Azzone & Noci, 1996; Klassen & Whybark, 1999).

A phenomenon concomitant to the rapid deterioration of the natural environment is organizational speed in business. Speed refers to the frequency of activities in some unit of social time (Bluedorn, 2002). Most research on speed has taken for granted that speed is a positive firm attribute due to fast-changing environments (D'Aveni, 1994; Vinton, 1992). Based on this assumption, prior work has primarily focused on the relationship between speed and firm performance (e.g., Atuahene-Gima, 2003; Baum & Wally, 2003; Kessler & Chakrabarti, 1996; Más-Ruiz, Nicolau-Gónzalbez, & Ruiz-Moreno, 2005). A few studies, however, have warned of the potential negative consequences of unremitting speed in relation to organizational survival (Forbes, 2005; Perlow, Okhuysen, & Repenning, 2002), firms' international expansion (Vermeulen & Barkema, 2002), and organizational responses to climate change (Slawinski & Bansal, 2012).

With the exceptions of Slawinski and Bansal (2012) and Bansal (2003), the effect of speed on firms' environmental outcomes remains unexplored. This lack of research constitutes an important gap given the relevance of organizational time for

firms' environmental strategies and performance (Ortiz-de-Mandojana, 2011; Slawinski & Bansal, 2012). Therefore, organizational speed should be considered because is one of the dimensions of time. Furthermore, studying the determinants of firms' environmental performance is important due to its implications for environmental sustainability and society as a whole.

In this paper, we take a step in addressing this research gap by studying the effect of organizational speed on corporate environmental performance. We explore speed at the organizational level of analysis through mergers and acquisitions (hereafter referred as M&As) and strategic alliances. We argue that low and moderate levels of organizational speed can improve corporate environmental performance. However, high levels of speed can result in a decline in environmental performance. We tested our hypotheses on a sample of 427 U.S. companies included in Newsweek's Green Ranking 2009. Our findings reveal that the relationship between speed and corporate environmental performance is U-shaped.

This paper makes important contributions to the extant literature. First, we identify one of the determinants of corporate environmental performance. Along with the main drivers identified by prior research, we add organizational speed to explain both improvements and declines in firms' environmental performance. Second, our work adds to a growing body of scholars who recognize the importance of time and speed as one of its dimensions, in relation to firms' environmental issues (Bansal, 2003; Bansal & DesJardine, 2014; Ortiz-de-Mandojana, 2011; Slawinski & Bansal, 2012).

## 4.2 Determinants of Corporate Environmental Performance: A Brief Literature Review

Corporate environmental performance is defined as the impact of a firm's processes and products on the natural environment (Azzone & Noci, 1996; Klassen & Whybark, 1999). Previous research on environmental performance has sought to understand its determinants at different levels of analysis: industrial, organizational, and individual (Etzion, 2007).

At the industry level, the main focus has been on how government regulation, consumer pressure, and industry dynamics affect corporate environmental performance (Etzion, 2007). In relation to government regulation, Henriques and Sadorsky (1999) found that due to higher consequences of noncompliance in more regulated industries, firms operating in these sectors will incorporate environmental issues into their management strategies to a greater extent. However, corporate responses also vary based on managers' perceptions of regulatory pressures (Etzion, 2007; Hoffman & Georg, 2013). Consumer pressure also has an intense influence on firms in relation to supply green chain (Delmas & Montiel, 2009), product performance, product safety, and environmental impact (Etzion, 2007). More advanced environmental practices have been found to be correlated to advertising intensity (Arora & Cason, 1996; McWilliams & Siegel, 2000). In relation to industry dynamics, scholars have studied how the firm position within an industry (Reinhardt, 1998), field cohesion (Bansal & Roth, 2000), and industry associations (Barla, 2007; Boiral & Henri, 2012; King & Lenox, 2000; Lenox & Nash, 2003; Rivera & de Leon, 2005) can play a role in determining firms' environmental performance.

At the organizational level, scholars have noted several organizational attributes that influence superior environmental performance, such as innovation, the integration of multi-stakeholder perceptions, and knowledge and information flow (Etzion, 2007). Environmental innovation is an important driver of reductions in toxic emissions (Carrión-Flores & Innes, 2010). Through innovation in design and manufacturing issues (Christmann, 2000) or in the development of new markets (Senge & Carstedt, 2001), firms can develop new practices that are environmentally conscious and lead to environmental performance improvement. In relation to stakeholder involvement, several studies have reported its positive influence on corporate environmental performance through the adoption of environmental management systems (Anton, Deltas, & Kahnna, 2004) or collaborative initiatives with customers that increase waste prevention (Klassen & Vachon, 2003). Timely information regarding the value of corporate pro-environmental actions from headquarter levels to the business units has also been identified as having the potential to improve environmental performance (Lenox & King, 2004; Sharma, Pablo, & Vredenburg, 1999). Other firm attributes that are associated with environmental performance and are often used as control variables are size, slack, and multinational scope (Etzion, 2007).

At the individual level of analysis, scholars have considered the role of individual and managerial perceptions and interpretations in a firm's choice of environmental strategies that can potentially improve corporate environmental performance (Hart & Milstein, 2003; Henriques & Sharodosky, 1999; Sharma, 2000). For example, Sharma (2000) found that the perception of environmental issues as opportunities, rather than threats, influenced the adoption of more advanced environmental strategies. Given the importance of time to environmental issues, some scholars have studied its role in shaping a firm's environmental behaviors. For example,

Henriques and Sharodosky (1999) conducted a survey of the largest 750 firms in Canada and found that firms that viewed environmental issues as important in the next five years were more likely to formulate an environmental plan than firms with a short-term view of environmental concerns. More recent studies have built on the firm's time perspective and examined the effect of executives' time perspective on corporate environmental performance (e.g., Ortiz-de-Mandojana, 2011) and on organizational responses to climate change (e.g., Slawinski & Bansal, 2012).

As outlined above, in the research discussion of the predictors of environmental performance, the role of organizational speed is virtually absent. Exceptions are the works of Slawinski and Bansal (2012), which described the tension between speed and breadth of responses in addressing climate change, and Bansal (2003), which examined the speed of response to environmental issues in relation to the congruence between individual concerns and organizational values. In this study, we place organizational speed at the centre of the research and explore the relationship between speed at the organizational level of analysis and corporate environmental performance.

## 4.3 Organizational Speed and Environmental Performance: An Inverted U-Shaped Relationship

Organizational speed refers to "the frequency (number) of activities in some unit of social time" (Bluedorn, 2002: 104). Previous studies have focused on certain aspects of speed, such as the speed of internationalization as the number of foreign subsidiaries (Vermeulen & Barkema, 2002) or the speed of strategic renewal actions as the number of actions per time period (Volberda et al., 2001). In this study, we focus on speed regarding strategic processes as the number of M&As and the number of strategic alliances.

Low and moderate levels of speed can help improve corporate environmental performance because at such levels, managers may have the time and attentional slacks to accommodate environmental issues and to use the resources and capabilities obtained through M&As and alliances to enhance environmental performance.

Low and moderate levels of speed allow managers time to consider environmental issues. M&As and alliance processes result in meetings, negotiations, information analysis, and other related tasks (Hitt et al., 2001). Although these complex tasks demand substantial managerial time and attention, at a low and moderate number of M&As and alliances, managers may still have some time slack to consider other issues, such as environmental concerns. Managerial time can be essential for firms to adopt pro-environmental practices. Indeed, along with money, time was referred to by managers of Canadian firms in the oil and gas, mining, and forestry industries as the resource required to invest in sustainable development practices (Bansal, 2005).

At low and moderate levels of speed, managers may be able to allocate attention between the present, by managing their current demands, and the future, by assessing the long-term outcomes of the firm's actions. Attention to the long term may be crucial for a firm's environmental behavior. Previous research has shown that a focus on future outcomes predicts pro-environmental attitudes and engagement in sustainable behaviors (Arnocky, Milfont, & Nicol, 2014). For example, Corral-Verdugo, Fraijo-Sin, and Pinheiro (2006) found that individuals who were oriented to the future had a higher engagement in water conservation, whereas individuals who were more oriented to the present tended to be less conservationist.

At low and moderate levels of speed, firms can also take advantage of the resources and capabilities obtained through M&As and alliances to improve corporate

environmental performance. M&As and alliances provide a firm with resources such as capital and knowledge and stimulate capabilities such as organizational learning. For example, aligning with diverse partners, firms can engage in exploration learning that entails search, experimentation, discovery, and innovation (Lin, 2012). These learning activities can promote novel approaches to complex issues, such as environmental problems, new interpretations of information, and even shifts in the firm's shared vision, which is crucial for adopting more proactive environmental practices (Lin, 2012). Organizational learning can foster environmental proactivity (Vidal-Salazar, Cordón-Pozo, & Ferrón-Vílchez, 2012), but learning takes time (Berends & Antonacopoulou, 2014). Therefore, firms that are involved in moderate levels of speed could have the time required for exploration learning and could potentially improve their environmental performance through the adoption of proactive environmental practices.

The discussion above suggests that low and moderate levels of speed can have a positive effect on corporate environmental performance. However, as organizational speed continues to increase, it will reach a turning point, where the effect of speed will be negative. Stated differently, a high number of M&As and alliances can deteriorate the firm's environmental performance. Temporal myopia can help explain the right side of the curve.

Temporal myopia refers to the ability to discern the present without considering the future (Miller, 2002). It arises from humans' cognitive limitations, such as attentional constrains. Miller (2002) studied temporal myopia in technology acquisitions. He found that managers who focused exclusively on the current period and maximized current returns failed to consider the future implications of the acquired technology. These managers neglected to account for the switching costs to new

technologies that may be developed in the future. As a result, the technologies chosen in the present could underperform compared to the long-run alternatives. This study shows that a heavy focus on the short term can result in suboptimal outcomes for the long term (Laverty, 1996; March 1999).

Similarly, as the number of M&As and alliances increases from moderate to high, the amount of related tasks, commitments, and decisions that demand managerial time and attention become increasingly large. Because managers' attention is limited, they tend to focus on the present to make sense of all their pressing issues. A heavy focus on the short term inevitably means less attention to the long term. Managers may thus experience temporal myopia. Arnocky, Milfont, and Nicol (2014) found that reduced immediate concerns are the mechanism by which future thinking influences sustainable behaviors, so that individuals who are concerned with the immediate consequences of their actions are less likely to engage in pro-environmental attitudes and behavior. In addition, the lack of time can be an impediment for firms to develop exploring learning that triggers environmental proactivity because as explained above, organizational learning requires time (Berends & Antonacopoulou, 2014). Consequently, firms engaged in high speed could be less likely to engage in actions to enhance environmental performance.

Furthermore, myopic behavior also implies the risk of overvaluing the short term and undervaluing the long run, which can cause managers to postpone environmental decisions. To improve environmental performance, firms can invest in pollution prevention or pollution control (Hart, 1995). These two approaches to reducing environmental emissions entail capital investments (Hart, 1995) whose returns are long term and diffuse. Bazerman and Hoffman (1999) suggested that individuals tend to use irrationally high discount rates and argued that such a bias suppresses investment in

factors that provide deferred returns, which is the case for environmental investments. Similar difficulties in evaluating unusual events that could happen in the future, such as chemical accidents and spills, could cause managers to underinvest in the prevention of those accidents (Kunreuther & Bowman, 1997; Kleindorfer & Saad, 2005). Therefore, firms that become short sighted because of high levels of speed could apply disproportionately high discount rates and postpone environmental investments. As a result, the firm's environmental performance could deteriorate.

In summary, at low and moderate levels of M&As and alliance processes, increases in the number of M&As and alliances allow a firm to improve its environmental performance. When the firm reaches a high level of M&As and alliance processes, increases in the number of M&As and alliances can result in the firm's environmental performance decline. Based on these arguments, we hypothesized an inverted U-shaped relationship between the level of M&As and alliance processes and a firm's environmental performance.

> ***Hypothesis 1a:*** *There will be a curvilinear, inverted U-shaped relationship between a firm's number of M&As and its environmental performance.*

> ***Hypothesis 1b:*** *There will be a curvilinear, inverted U-shaped relationship between a firm's number of strategic alliances and its environmental performance.*

## 4.4 Methods

### 4.4.1 Sample

Our sample was drawn from the 500 companies included in the *Newsweek Green Ranking* 2009 (hereafter referred as Newsweek). This ranking provides data about firms' environmental performance for the largest publicly traded U.S companies. We chose this sample of companies because our measure of environmental performance was based on this ranking. Because of data availability, our final sample was formed by 427 companies that operated in seventeen different industries according to the 2-digit North American Industry Classification System (NAICS).

### 4.4.2 Measures

#### Dependent variable

*Environmental performance*. We used the "Environmental Impact Score" (EIS) reported by Newsweek as a measure of corporate environmental performance. The EIS is a comprehensive and standardized quantitative performance measurement that captures the total cost of all environmental impacts of a corporation's global operations. This measure captures a firm's environmental impact across more than 700 metrics, including nine greenhouse gas emissions, water use, solid waste disposal, and acid rain emissions (sulpur dioxide, nitrogen oxide, and ammonia). These data are compiled by Trucost. The EIS is normalized against a company's annual revenue by Trucost to allow for comparisons across firm size and industries. Higher environmental impact scores denote better environmental performance.

**Hypotheses-testing variables**

We focused on organizational speed, looking at firms' M&As and strategic alliances. We collected data on M&As and alliances from Thomson Financial's Security Data Corporation database (hereafter referred as SDC). SDC collects data from the U.S. Securities and Exchange Commission (SEC) filings (and their international counterparts), trade publications, wires, and news sources. Although this database has some limitations, it is considered the most comprehensive data source for M&As and strategic alliances, and it has been extensively used in previous studies (e.g., Annad & Khanna, 2000; Li et al., 2012; Sampson, 2005; Tong & Li, 2011).

We used the total number of M&As and of alliances in which each firm was involved. This measure of speed matches our definition of speed and is consistent with previous literature. For example, Volberda et al. (2001) measured speed as the number of strategic renewal actions, and Vermeulen and Barkema (2002) measured it as the number of foreign expansions that a firm undertook in a given period. The predictors lagged the dependent variable by one year.

*M&As.* We counted every M&A in which each company of our sample was an acquirer at the time of the announcement. We included M&As whose status in SDC was defined as *completed*, *intended*, *pending* (i.e., the transaction has been announced but has not been completed or withdrawn) or *withdrawn* (i.e., the target or acquirer in the transaction has terminated its agreement, letter of intent, or plans for the acquisition or merger) in the year of observation. We excluded M&As under the status of *rumor* or *discounted rumor* and those for which the status was *unknown* according to SDC.

*Strategic alliances.* Alliances are enduring agreements between two or more firms that imply the exchange, sharing or co-development of products, technologies,

and services (Chao, 2011). A firm's number of strategic alliances agreements was also counted at the time of the announcement. Following the same criterion that we used for M&As, we included only alliances under the status *completed/signed, letter of intent, pending, renegotiated,* or *terminated* and excluded alliances classified as *rumor.* Our measure of strategic alliances includes domestic and international alliances, bilateral and multilateral agreements, strategic alliances that resulted in a joint venture and those that did not, research and development agreements, marketing agreements, manufacturing agreements, and several other types of collaboration agreements. We did not impose any restrictions. Due to the same reasons explained above for M&As, we were interested in the overall number of strategic alliances in which a company was involved, regardless of the type of alliance. This measure was consistent with our theory and research purposes.

**Control variables**

Based on prior research on corporate environmental performance, we included control variables at the firm level (financial performance, firm size, capital intensity, and firm age) and controlled for industry differences. Control variables lagged the dependent variable by one year.

*Financial performance.* In previous research, corporate financial performance has been negatively associated with corporate sustainable development (Bansal, 2005). We used return on assets (ROA), measured as net income between total assets, as a proxy of financial performance (Walls, Berrone, & Phan, 2012).

*Firm size.* Although firms included in the sample were large, they varied in size. Firm size is a determinant of corporate environmental behavior. Larger firms are more likely to exhibit pro-environmental behaviors and to commit to sustainable development

than smaller firms (Aragón-Correa, 1998; Aragón-Correa et al., 2008; Bansal, 2005; Christmann, 2004). We used the logarithm of the number of employees for firm size. Transforming the number of employees to the logarithm generated a normal distribution. Data for company employees were obtained from the Compustat North America database.

*Firm age.* We controlled for firm age because corporate environmental behavior is rooted in time (Slawinski & Bansal, 2012). Older firms with older equipment could have a greater environmental impact than younger firms, which operate with new equipment and technologies. We measured firm age as the number of years since incorporation (Jayaraman et al., 2000; Kotha, Zheng, & George, 2011). The logarithm of firm age was taken to achieve the most normal distribution. Data on the firm's year of incorporation were collected from the Mergent Online database.

*Capital intensity.* Firms that belong to industries that are capital intensive in production processes generate a greater amount of pollution and have a greater environmental impact (Bansal, 2005). We measured capital intensity as the net value of the property, plant, and equipment divided by total sales (Bansal, 2005; Walls et al., 2012; Sharma & Kesner, 1996). The logarithmic transformation of capital intensity was used to generate a normal distribution. Data for capital intensity were extracted from the Compustat North America database.

*Industry.* We included industry dummies to control for differences at the industry level (Walls et al., 2012). To avoid multicollinearity problems, industries that had fewer than four companies were excluded from the analysis. As a result, our sample consisted of the following seventeen industries based on 2-digit NAICS codes: mining, quarrying, and oil and gas extraction (NAICS 21), utilities (NAICS 22), construction

(NAICS 23), manufacturing (NAICS 31 - 33), wholesale trade (NAICS 42), retail trade (NAICS 44 and 45), transportation and warehousing (NAICS 48), information (NAICS 51), finance and insurance (NAICS 52), real estate and rental and leasing (NAICS 53), professional, scientific, and technical services (NAICS 54), administrative and support and waste management and remediation services (NAICS 56), health care and social assistance (NAICS 62), and accommodation and food services (NAICS 72). The manufacturing sector was taken as the reference dummy and was not included in the analyses.

### 4.4.3 Data Analysis

To test our hypotheses, we performed a hierarchical regression model. Based on the characteristics of our data, we ran regressions with robust standard errors. Robust standard errors provide coefficients that are not biased in the presence of heteroskedasticity.

## 4.5 Results

Table 4.1 reports the descriptive statistics and correlations for the dependent and independent variables. The values of environmental performance range from 0.2 and 100, where higher values denote better performance. The mean age is 50.49, indicating that on average, our sample consists of established firms. The highest correlation is between environmental performance and capital intensity, indicating a strong linear relationship. Although this correlation value is slightly high, it will not cause problems of multicollinearity, as the analysis of VIFs shows.

Table 4.2 provides the results of the regression analyses. We estimated five models. Models 3 and 5 included the quadratic terms, M&As and strategic alliances,

respectively. Following Aiken and West (1991) and Cohen et al. (2003), we mean-centered the variables prior to the creation of the squared terms to avoid potential multicollinearity problems.

We computed the variance inflation factors (VIFs) for each of the independent variables to assess potential multicollinearity. The VIFs scores ranged from 1.06 to 3.56. These values were below the recommended threshold of 5 or 10 (O'brien, 2007), which indicated that multicollinearity was not a concern in our model.

We began by estimating the baseline model, which contains only the control variables in Model 1. Financial performance was statistically significant ($\beta$=23.92; $p<0.05$). This result is consistent with previous literature that has related better environmental management and corporate sustainable development to higher financial performance (Bansal, 2005; Klassen & McLaughlin, 1996). Capital intensity was also statistically significant and negatively linked to corporate environmental performance ($\beta$= −6.42; $p<0.001$). In contrast to prior studies, firm size was not significant. This result suggests that larger firms did not exhibit better environmental performance than smaller firms in our sample. Firm age was negative and significant ($\beta$= −1.990; $p<0.05$). Younger firms showed better environmental performance than older firms.

**TABLE 4.1**
**Descriptive Statistics and Correlations**

| | Mean | S.D. | Min | Max | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|---|---|---|---|
| **1 Environmental performance** | 48.958 | 28.645 | 0.2 | 100 | | | | | | |
| **2 Financial performance** | 0.073 | 0.067 | -0.293 | 0.409 | -0.039 | | | | | |
| **3 Firm size** | 48.25 | 108.777 | 0.039 | 1900 | 0.073 | 0.005 | | | | |
| **4 Capital intensity** | 0.446 | 0.639 | 0.005 | 4.164 | -0.418*** | -0.15** | -0.09† | | | |
| **5 Firm age** | 50.49 | 41.175 | 0 | 247 | -0.299*** | 0.143** | 0.072 | -0.118* | | |
| **6 M&As** | 2.259 | 3.115 | 0 | 27 | 0.188*** | 0.068 | 0.134** | -0.218*** | -0.038 | |
| **7 Strategic alliances** | 0.923 | 2.025 | 0 | 24 | 0.118* | 0.075 | 0.116* | -0.108* | -0.007 | 0.396*** |

N=427. Significance levels: †p<0.1 *$p$<0.05 **$p$<0.01 ***$p$<0.001

## TABLE 4.2
## Influence of Organizational Speed on Corporate Environmental Performance

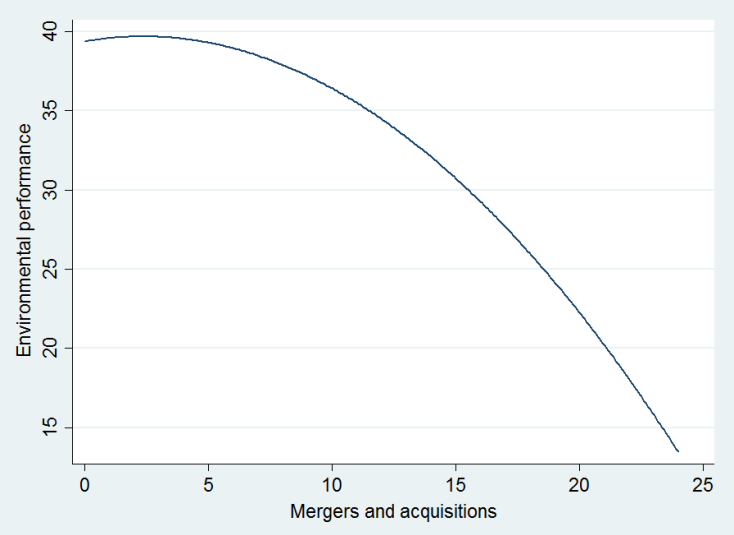
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
|---|---|---|---|---|---|
| **Control variables** | | | | | |
| Financial performance | 23.92* | 26.07* | 25.32* | 21.93† | 26.74* |
| | (11.37) | (11.68) | (11.58) | (11.23) | (11.17) |
| Firm size | -0.606 | -0.355 | -0.434 | -0.984 | -1.062† |
| | (0.632) | (0.671) | (0.671) | (0.646) | (0.641) |
| Capital intensity | -6.420*** | -6.515*** | -6.330*** | -6.258*** | -6.200*** |
| | (1.001) | (1.001) | (1.038) | (1.009) | (1.003) |
| Firm age | -1.990* | -2.027* | -2.037* | -1.931* | -1.850* |
| | (0.818) | (0.821) | (0.825) | (0.809) | (0.806) |
| NAICS 21 | -6.603† | -6.789† | -6.754† | -6.564† | -6.285 |
| | (3.992) | (3.965) | (4.010) | (3.934) | (3.897) |
| NAICS 22 | -17.03*** | -17.46*** | -16.69*** | -16.93*** | -15.97*** |
| | (3.732) | (3.682) | (3.671) | (3.717) | (3.700) |
| NAICS 23 | -4.163 | -5.109 | -3.659 | -2.934 | -1.185 |
| | (8.730) | (8.755) | (8.676) | (8.850) | (8.718) |
| NAICS 31 | -23.80*** | -24.50*** | -23.77*** | -23.36*** | -23.11*** |
| | (3.512) | (3.505) | (3.476) | (3.510) | (3.520) |
| NAICS 32 | -10.39*** | -10.64*** | -10.36*** | -10.66*** | -10.69*** |
| | (2.550) | (2.555) | (2.550) | (2.476) | (2.428) |
| NAICS 42 | 12.07* | 12.39* | 12.12* | 12.43* | 12.73* |
| | (5.498) | (5.126) | (5.329) | (5.482) | (5.431) |
| NAICS 44 | 18.00*** | 17.08*** | 17.86*** | 19.37*** | 20.42*** |
| | (2.080) | (2.210) | (2.232) | (2.093) | (2.059) |
| NAICS 45 | 18.20*** | 17.23*** | 17.93*** | 19.42*** | 20.20*** |
| | (2.339) | (2.409) | (2.437) | (2.423) | (2.465) |
| NAICS 48 | 0.502 | -0.240 | 0.600 | 0.945 | 1.539 |
| | (5.004) | (4.947) | (5.033) | (5.101) | (5.130) |
| NAICS 51 | 36.77*** | 37.20*** | 37.01*** | 35.53*** | 36.28*** |
| | (2.371) | (2.469) | (2.453) | (2.498) | (2.467) |
| NAICS 52 | 43.00*** | 43.15*** | 43.72*** | 43.59*** | 44.43*** |
| | (2.489) | (2.418) | (2.335) | (2.481) | (2.489) |
| NAICS 53 | 30.55** | 30.21* | 30.54** | 31.07** | 32.56** |
| | (11.55) | (11.78) | (11.64) | (11.22) | (11.16) |
| NAICS 54 | 34.57*** | 34.64*** | 34.78*** | 34.34*** | 35.08*** |
| | (3.755) | (3.834) | (3.742) | (3.806) | (3.733) |
| NAICS 56 | 17.81* | 16.99* | 17.82* | 18.22* | 18.29* |
| | (8.569) | (8.533) | (8.648) | (8.534) | (8.328) |
| NAICS 62 | 27.40*** | 27.29*** | 26.97*** | 28.17*** | 28.92*** |
| | (3.363) | (3.329) | (3.419) | (3.423) | (3.513) |
| NAICS 72 | -0.178 | -1.378 | -0.414 | 0.238 | 0.149 |
| | (4.636) | (4.784) | (4.706) | (4.537) | (4.597) |
| **Linear and quadratic effects** | | | | | |
| M&As | | -0.385 | 0.265 | | |
| | | (0.310) | (0.411) | | |
| M&As squared | | | -0.056* | | |
| | | | (0.0275) | | |
| Strategic alliances | | | | 0.923* | 2.111*** |
| | | | | (0.432) | (0.504) |
| Strategic alliances squared | | | | | -0.109*** |
| | | | | | (0.0260) |
| Constant | 39.31*** | 38.57*** | 39.38*** | 40.50*** | 40.20*** |
| | (4.387) | (4.498) | (4.580) | (4.375) | (4.320) |
| Observations | 427 | 427 | 427 | 426 | 426 |
| R-squared | 0.783 | 0.784 | 0.786 | 0.786 | 0.79 |

Robust standard errors are reported in parentheses.
Significance levels: †p<0.1 *p<0.05 **p<0.01 ***p<0.001

Hypothesis 1a states that the relationship between organizational speed and corporate environmental performance has an inverted U-shape. In Model 2, we included the linear effect of M&As, and in Model 3 we added M&As squared. Model 3 shows that the positive coefficient of M&As and the negative and significant coefficient of M&As squared ($\beta = -0.056$; $p<0.05$) confirm Hypothesis 1a. To further prove this finding, we plotted the results in Figure 4.1. The upward movement of the U is not completely depicted in the graph because of the range of M&As in our sample of companies.

**FIGURE 4.1**

**Mergers and Acquisitions and Environmental Performance**

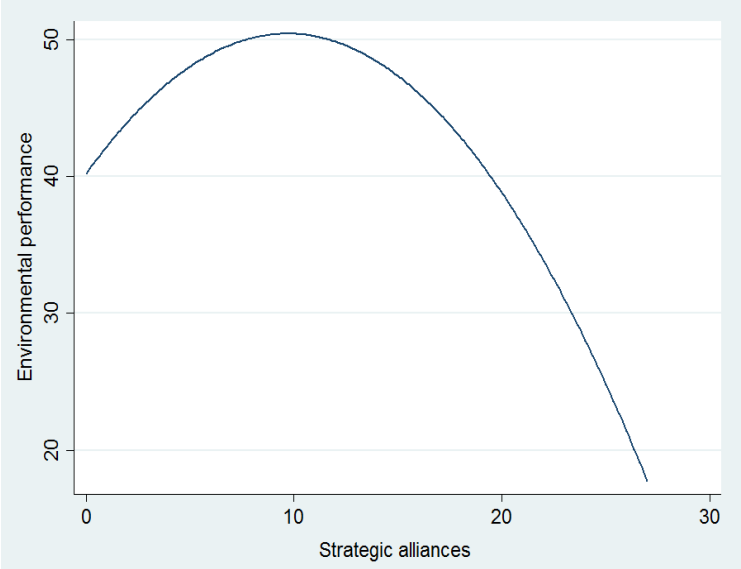



Hypothesis 1b also predicts an inverted U-shape between strategic alliances and corporate environmental performance. The linear effect of strategic alliances and its squared term were added in Models 4 and 5, respectively. Model 5 shows that the effect of alliances is positive and significant ($\beta = 2.111$; $p<0.001$), and the effect of its squared term is negative and significant ($\beta = -0.109$; $p<0.001$). These results strongly support Hypothesis 1b. Figure 4.2 graphically depicts the curvilinear relationship between

alliance activity and firm performance. The U-shaped relationship is not symmetrical for our sample of companies. After that threshold, as the number of alliances increases, environmental performance continuously declines.

**FIGURE 4.2**

**Strategic Alliances and Environmental Performance**




## 4.6 Discussion

This study aimed to explain the relationship between organizational speed and corporate environmental performance. We explored speed in relation to corporate M&As and alliance processes and found that speed has an inverted U-shaped effect on firms' environmental performance. Our findings reveal that at low and moderate levels of speed, M&As and alliances have a positive effect on environmental performance. In contrast, at high levels of speed, M&As and alliance activities deteriorate corporate environmental performance. Our results have important research and managerial implications, which are discussed next.

### 4.6.1 Overview and Contributions

Our work contributes to identifying speed as one of the predictors at the organizational level of both the improvement and decline of firms' environmental performance. Previous research has identified several determinants of environmental performance at individual, corporate, and industry levels (Etzion, 2007). However, studies that have investigated speed as a predictor of firms' environmental outcomes are incipient and limited to date (Bansal, 2003; Slawinski & Bansal, 2012). For example, Slawinski and Bansal (2012) studied the speed of response to climate change and found that firms that responded faster took a fragmented approach, rather than seeking holistic solutions to climate change, which exposed the companies to reprimands by stakeholders. Bansal (2003) argued that a faster organizational response to environmental issues was motivated by the alignment between individual concerns and organizational values. By examining the effect of speed on corporate environmental performance, we extend this stream of research. More broadly, our work adds to a growing body of scholars who recognize the importance of organizational time to firms' environmental behavior (e.g., Bansal & DesJardine, 2014; Ortiz-de-Mandojana, 2011; Slawinski & Bansal, 2012).

Our work also contributes to the extant research on the consequences of speed. Prior work has been polarized on its positive or its negative effects. Our findings show that speed can have a positive effect and also a negative effect on corporate environmental performance. In other words, the effect is dependent on the level of speed. Previous studies that have assumed that speed is a positive firm attribute (D'Aveni, 1994; Vinton, 1992) have found, for example, that fast strategic decision-making is positively associated with firms' performance (e.g., Baum & Wally, 2003;

Judge & Miller, 1991). Although positive, this relationship has been shown to be complex and context specific (Forbes, 2005).

Other studies, however, have found evidence for the negative effect of speed on different organizational outcomes (Forbes, 2005; Perlow et al., 2002; Slawinski & Bansal, 2012; Vermeulen & Barkema, 2002). For example, Vermeulen and Barkema (2002) showed that too much foreign expansion in a short period of time created time-compression diseconomies. Forbes (2005) found that bankruptcies were more common among companies with a high decision speed, and Perlow et al. (2002) illustrated an extreme situation in which too much speed caught a firm in a "speed trap," a pathological context where organizational members believed that they had to make ever faster decisions to survive, but this belief eventually resulted in organizational decline.

Although not empirically tested, Perlow et al.'s (2002) work implicitly seemed to indicate a quadratic relationship between speed and organizational outcomes. Our findings show that indeed, speed can help a firm improve its environmental performance, but speed can also be inimical at a certain level. This result suggests that the effect of speed on organizational outcomes may be more complex than the effects predicted by a linear function. We hope that our findings stimulate other researchers to investigate in greater depth the relationship between speed and social outcomes.

### 4.6.2 Managerial Implications

This study is also relevant for managers. First, our findings suggest that managers should assess the benefits and the social costs of paramount growth. Managers face increasing pressure to grow relentlessly. They often use M&As as a mechanism to achieve pressing growth objectives because doing so with the firm's own resources and capabilities alone would not be possible. However, too much of

something good, as organizational speed is generally considered, can be more problematic than it first appears (Perlow et al., 2002). Our results show that relentless organizational speed through M&As and alliances can also have corporate and social downsides. Therefore, managers should achieve growth goals that do not compromise firms' environmental performance because of too much speed.

Second, our work suggests that managing the "right" level of M&As and alliances is crucial for firms' environmental sustainability. The corporate sector has become increasingly seen as the cause of environmental problems but also as the source of the solutions (Hoffman & Bansal, 2012). Our results resonate with this view. Speed at the organizational level of analysis is in the management's hands. Managers that engage in too many M&As and alliances can deplete firms' resources and preclude investments in reducing environmental emissions. Managers should therefore balance the pace of these strategic processes to avoid the pervasive effects of speed and to be part of the solution of environmental sustainability.

### 4.6.3 Limitations and Suggestions for Future Research

We acknowledge a few limitations of our study. First, organizational speed is reflected in several aspects of organizational life, such as the number of new products launched (e.g., Atuahene-Gima, 2003), the firm's international activity (Vermeulen & Barkema; 2002), or the firm's speed of response (e.g., Slawinski & Bansal, 2012). In this study, we focused on M&As and strategic alliance processes as indicators of speed. An interesting extension of our work could consist of studying the effect of other facets of speed on corporate environmental performance and behavior.

Second, our sample consisted of the 500 largest publicly traded U.S companies. The nature of our sample limits the extent to which our findings can be generalized to

small or medium companies. Future research might test the relationship between speed and environmental performance in a more heterogeneous sample in terms of size. Additionally, there are cross-cultural differences in how companies perceive time, which are reflected in firms' behavior (Levine, West, & Reis, 1980). For example, Levine and Bartlett (1984) showed that there are differences in the average speed of walking and postal transactions and the accuracy of bank clocks across countries. Because organizational speed may vary from one country to another, future studies could embrace efforts to analyze how those differences affect firms' environmental performance.

Third, the cross-sectional design of our study limits our ability to make causal inferences about the tested relationships. In the regression analyses, we lagged the predictors and control variables from the time period in which the dependent variable was collected. This fact supports a causal relationship. However, our findings should be interpreted with caution. Our conclusions would be stronger if future studies examined the evolution of the predictor and outcome variables over time.

## 4.7 References

Aiken L. S., & West, S. G. 1991. ***Multiple Regression: Testing and Interpreting Interactions.*** Sage: Newbury Park, CA.

Anand, B. N., & Khanna, T. 2000. Do firms learn to create value? The case of alliances. ***Strategic Management Journal,*** 21: 295–315.

Anton, W. R. Q., Deltas, G., & Kahnna, M. 2004. Incentives for environmental self-regulation and implications for environmental performance. ***Journal of Environmental Economics and Management,*** 48: 632–654.

Aragón-Correa, J. A. 1998. Strategic proactivity and firm approach to the natural environment. ***Academy of Management Journal,*** 41: 556–567.

Aragón-Correa, J. A., Hurtado-Torres, N., Sharma, S., & García-Morales, V. 2008. Environmental strategy and performance in small firms: A resource-based perspective. ***Journal of Environmental Management,*** 86: 88–103.

Arnocky, S., Milfont, T. L., & Nicol, J. 2014. Time perspective and sustainable behavior: Evidence for the distinction between consideration of immediate and future consequences. ***Environment and Behavior,*** 46: 556–582.

Arora, S., & Cason, T. N. 1996. Why do firms volunteer to exceed environmental regulations? Understanding participation in EPA's 33/50 program. ***Land Economics,*** 72: 413–432.

Atuahene-Gima, K. 2003. The effects of centrifugal and centripetal forces on product development speed and quality: How does problem solving matter? ***Academy of Management Journal,*** 46: 359–373.

Azzone, G., & Noci, G. 1996. Measuring the environmental performance of new products: An integrated approach. ***International Journal of Production Research,*** 34: 3055–3078.

Bansal, P. 2003. From issues to actions: The importance of individual concerns and organizational values in responding to natural environmental issues. ***Organization Science,*** 14: 510–527.

Bansal, P. 2005. Evolving sustainably: A longitudinal study of corporate sustainable development. ***Strategic Management Journal,*** 26: 197–218.

Bansal, P., & DesJardine, M. 2014. Business sustainability: It is about time. ***Strategic Organization,*** 12: 70–78.

Bansal, P., & Roth, K. 2000. Why companies go green: A model of ecological responsiveness. ***Academy of Management Journal,*** 43: 717–736.

Barla, P. 2007. ISO 14001 certification and environmental performance in Quebec's pulp and paper industry. ***Journal of Environmental Economics and Management,*** 53: 291–306.

Baum, J. R., & Wally, S. 2003. Strategic decision speed and firm performance**.** ***Strategic Management Journal,*** 24: 1107–1129.

Bazerman, M. H., & Hoffman, A. J. 1999. Sources of environmentally destructive behavior: Individual, organizational and institutional perspectives. ***Research in Organizational Behavior,*** 21: 39–79.

Berends, H., & Antonacopoulou, E. 2014. Time and organizational learning: A review and agenda for future research. ***International Journal of Management Reviews,*** 16: 437–453.

Bluedorn, A. C. 2002. ***The Human Organization of Time***. Stanford: Stanford University Press.

Boiral, O., & Henri, J. 2012. Modelling the impact of ISO 14001 on environmental performance: A comparative approach. ***Journal of Environmental Management,*** 99: 84–97.

Carrión-Flores, C. E., & Innes, R. 2010. Environmental innovation and environmental performance. ***Journal of Environmental Economics and Management,*** 59: 84–97.

Chao, Y. 2011. Decision-making biases in the alliance life cycle Implications for alliance failure. ***Management Decision,*** 49: 350–364.

Christmann, P. 2000. Effects of "best practices" of environmental management on cost competitiveness: The role of complementary assets. ***Academy of Management Journal,*** 43: 663–680.

Christmann, P. 2004. Multinational companies and the natural environment: Determinants of global environmental policy standardization. ***Academy of Management Journal,*** 47: 747–760.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. 2003. ***Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences***. Mahwah, NJ: Erlbaum.

Corral-Verdugo, V., Fraijo-Sing, B., & Pinheiro, J. Q. 2006. Sustainable behavior and time perspective: Present, past, and future orientations and their relationship with water conservation behavior. ***Interamerican Journal of Psychology,*** 40: 139–147.

D'Aveni, R. 1994. ***Hypercompetition: Managing the dynamics of strategic maneuvering.*** New York: The Free Press

Delmas, M., & Montiel, I. 2009. Greening the supply chain: When is customer pressure effective? ***Journal of Economics & Management Strategy,*** 18: 171–201.

Etzion, D. 2007. Research on organization and the natural environment, 1992-present: A review. ***Journal of Management,*** 33: 637–664.

Forbes, D. P. 2005. Managerial determinants of decision speed in new ventures. ***Strategic Management Journal,*** 26: 355–366.

Hart, S. L. 1995. A natural-resource-based view of the firm. ***Academy of Management Review,*** 20: 986–1014.

Hart, S. L., & Milstein, M. B. 1999. Global sustainability and the creative destruction of industries. ***Sloan Management Review,*** 41: 23–33.

Henriques, I., & Sadorsky, P. 1999. The relationship between environmental commitment and managerial perceptions of stakeholder importance. ***Academy of Management Journal,*** 42: 87–99.

Hitt, M. A., Harrison, J. S., & Ireland, R. D. 2001. ***Mergers and Acquisitions. A Guide to Creating Value for Stakeholders.*** New York: Oxford University Press.

Hoffman, A. J., & Bansal, P. 2012. ***Retrospective, Perspective, and Prospective: Introduction to the Oxford Handbook on Business and the Natural Environment.*** In Bansal, P., & Hoffman, A. J. (Eds.), The Oxford Handbook of Business and the Natural Environment (1st ed.). Oxford: University Press, Oxford.

Hoffman, A., & Georg, S. 2013. ***Introduction to Business and the Natural Environment. A History of Research on Business and the Natural Environment: Conversations from the Field.*** In Georg, S., & Hoffman, A. (Eds.), Business and the Environment: Critical Perspectives in Business and Management, Volume 1. Oxford, UK: Routledge.

Jayaraman, N., Khorana, A., Nelling, E., & Covin, J. 2000. CEO founder status and firm financial performance. ***Strategic Management Journal,*** 21: 1215–1224.

Judge, W. Q., & A. Miller. 1991. Antecedents and outcomes of decision speed in different environmental. ***Academy of Management Journal,*** 34: 449–463.

Kessler, E. H., & Chakrabarti, A. K. 1996. Innovation speed: A conceptual model of context, antecedents, and outcomes. ***Academy of Management Review,*** 21: 1143–1191.

King, A. A., & Lenox, M. J. 2000. Industry self-regulation without sanctions: The chemical industry's responsible care program. ***Academy of Management Journal,*** 44: 698–716.

Klassen R. D., & McLaughlin, C. P. 1996. The impact of environmental management on firm performance. ***Management Science,*** 42: 1199–1214.

Klassen, R. D., & Vachon, S. 2003. Collaboration and evaluation in the supply chain: the impact on plant-level environmental investment. ***Production and Operations Management,*** 12: 336–352.

Klassen, R. D., & Whybark, D. C. 1999. The impact of environmental technologies on manufacturing performance. ***Academy of Management Journal,*** 42, 599–615.

Kleindorfer, P. R., & Saad, G. H. 2005. Managing disruption risks in supply chains. ***Production and Operations Management,*** 14: 53–68.

Kotha, R., Zheng, A., & George, G. 2011. Research notes and commentaries entry into new niches: The effects of firm age and the expansion of technological capabilities on innovative output and impact. ***Strategic Management Journal,*** 32: 1011–1024.

Kunreuther, H., & Bowman, E. H. 1997. A dynamic model of organizational decision making: Chemco revisited six years after Bhopal. ***Organization science,*** 8: 404–413.

Laverty, K. J. 1996. Economic "short-termism": The debate, the unresolved issues, and the implications for management practice and research. ***Academy of Management Review,*** 21: 825–860.

Lenox, M. J., & King, A. A. 2004. Prospects for developing absorptive capacity through internal information provision. ***Strategic Management Journal,*** 25: 331–345.

Lenox, M. J., & Nash, J. 2003. Industry self-regulation and adverse selection: A comparison across four trade association programs. ***Business Strategy and the Environment,*** 12: 343–356.

Levine, R. V., & Bartlett, K. 1984. Pace of life, punctuality and coronary heart disease in six countries. ***Journal of Cross-Cultural Psychology,*** 15: 23–255.

Levine, R. V., West, L., & Reis, H. 1980. Perceptions of time and punctuality in the United States and Brazil. ***Journal of Personality and Social Psychology,*** 38: 541–550.

Li, D., Eden, L., Hitt, M. A., Ireland, R. D., & Garrett, R. P. 2012. Governance in multilateral R&D alliances. ***Organization Science,*** 23: 1191–1210.

Lin, J. 2012. Cross-sector alliances for corporate social responsibility partner heterogeneity moderates environmental strategy outcomes. ***Journal of Business Ethics,*** 110: 219–229.

March, J. G. 1999. Research on organizations: Hopes for the past and lessons from the future. ***Nordiske Organisasjonsstudier,*** I: 69–83.

Más-Ruiz, F. J., Nicolau-Gonzálbez, J. L., & Ruiz-Moreno, F. 2005. Asymmetric rivalry between strategic groups: Response, speed of response and ex ante vs. ex post competitive interaction in the Spanish bank deposit market. ***Strategic Management Journal,*** 26: 713–745.

McWilliams, A., & Siegel, D. 2000. Corporate social responsibility and financial performance: Correlation or misspecification. ***Strategic Management Journal,*** 21: 603-609.

Miller, K. D. 2002. Knowledge inventories and managerial myopia. ***Strategic Management Journal,*** 23: 689–706.

O'Brien, R. M. 2007. A Caution regarding rules of thumb for variance inflation factors. ***Quality & Quantity,*** 41: 673–690.

Ortiz-de-Mandojana, N. 2011. ***Gobierno Corporativo y Planteamiento Medioambiental de la Empresa.*** Granada: Ed. Universidad de Granada.

Perlow, L. A., Okhuysen, G. A., & Repenning, N. P. 2002. The speed trap: Exploring the relationship between decision making and temporal context. ***Academy of Management Journal,*** 45: 931–955.

Reinhardt, F. L. 1998. Environmental product differentiation: Implications for corporate strategy. ***California Management Review,*** 40: 43–73.

Rivera, J., & de Leon, P. 2005. Chief executive officers and voluntary environmental performance: Costa Rica's certification for sustainable tourism. ***Policy Sciences,*** 38: 417–437.

Sampson, R. C. 2005. Experience effects and collaborative returns in R&D alliances. ***Strategic Management Journal,*** 26: 1009–1031.

Senge, P. M., & Carstedt, G. 2001. Innovating our way to the next industrial evolution. ***Sloan Management Review,*** 42: 24–38.

Sharma, A., & Kesner, I. F. 1996. Diversifying entry: Some ex ante explanations for postentry survival and growth. ***Academy of Management Journal,*** 39: 635–677.

Sharma, S. 2000. Managerial interpretations and organizational context as predictors of corporate choice of environmental strategy. ***Academy of Management Journal,*** 43: 681–697.

Sharma, S., Pablo, A. L., & Vredenburg, H. 1999. Corporate environmental responsiveness strategies: The importance of issue interpretation and organizational context. ***Journal of Applied Behavioral Science,*** 35: 87–108.

Shrivastava, P. 1994. Castrated environments: Greening organizational studies. ***Organizational Studies,*** 15: 705–726.

Slawinski, N., & Bansal, P. 2012. A matter of time: the temporal perspectives of organizational responses to climate change. ***Organization Studies,*** 33: 1537–1563.

Tong, T. W., & Li, Y. 2011. Real options and investment mode: Evidence from corporate venture capital and acquisition. ***Organization Science,*** 22: 659–674.

Vermeulen, F., & Barkema, H. 2002. Pace, rhythm, and scope: process dependence in building a profitable multinational corporation. ***Strategic Management Journal,*** 23: 637–653.

Vidal-Salazar, M. D., Cordón-Pozo, E., & Ferrón-Vilchez, V. 2012. Human resource management and developing proactive environmental strategies: The influence of environmental training and organizational learning. ***Human Resource Management,*** 51: 905–934.

Vinton, D. 1992. A new look at time, speed, and the manager. ***Academy of Management Executive,*** 6: 7–16.

Volberda, H. W., Van den Bosch, F. A. J., Flier, B., & Gedajlovic, E. R. 2001. Following the herd or not? Patterns of renewal in the Netherlands and the UK. ***Long Range Planning,*** 34: 209–229.

Walls, J. L., Berrone, P., & Phan, P. H. 2012. Corporate governance and environmental performance: Is there really a link? ***Strategic Management Journal,*** 33: 885–913.

# CAPÍTULO 5

# RECAPITULACIÓN Y CONSIDERACIONES FINALES

## 5.1 Introducción

En el presente capítulo, presentamos una síntesis de las aportaciones obtenidas en los tres trabajos de investigación que integran esta tesis doctoral. En primer lugar, se resumen las principales conclusiones generales así como las específicas que se derivan de cada uno de los artículos. En segundo lugar, se detallan las implicaciones académicas y para la gestión empresarial. Por último, se indican las limitaciones de este trabajo y se plantean líneas de investigación para futuros trabajos.

## 5.2 Conclusiones del Trabajo de Investigación

La principal contribución de esta tesis doctoral es aportar una mayor comprensión de la relación entre la velocidad organizativa y las crisis empresariales[1] *(organizational mishaps)* y entre la velocidad y el desempeño medioambiental de la empresa.

Considerando los tres artículos de forma conjunta, los resultados obtenidos nos permiten concluir que la velocidad organizativa puede ser un determinante a nivel organizativo de las crisis y del desempeño medioambiental de la empresa. En otras palabras, y de forma más específica, la velocidad organizativa puede contribuir a que las empresas experimenten crisis, y aunque una velocidad moderada puede influir de forma positiva en el desempeño medioambiental de la empresa, demasiada velocidad puede llevar a su deterioro. Además, la relación entre velocidad organizativa, medida como número de alianzas estratégicas, y crisis es más intensa en entornos dinámicos.

[1] Tal y como detallábamos en el capítulo de introducción, las crisis empresariales *(organizational mishaps)* las definimos como sucesos o eventos provocados por la empresa que suponen una amenaza para su viabilidad (Pearson y Clair, 1998). Este término lo utilizamos para englobar tanto sucesos que han sido denominados por estudios previos como crisis organizativas *(organizational crises)* y como casos de ilegalidad corporativa *(corporate illegality).*

Tras haber expuesto la principal aportación de esta tesis doctoral, procedemos, a continuación, a detallar las conclusiones particulares de cada uno de los tres trabajos de investigación.

El capítulo 2 presenta el trabajo titulado ***"Racing to the Bottom: The Negative Consequences of Organizational Speed."*** La contribución de este artículo radica en plantear una relación positiva entre la velocidad organizativa y las crisis empresariales, y en identificar los mecanismos que pueden explicar dicha relación. A través del estudio de dos empresas, Coca-Cola y PepsiCo, los resultados muestran que durante el período 2000-2010 la velocidad de la empresa Coca-Cola (en términos de número de fusiones y adquisiciones, número de alianzas estratégicas, rotación de CEOs y volumen de acciones comercializadas) fue mayor (para cada uno de los indicadores de velocidad individualmente considerados) que la velocidad de la empresa PepsiCo, y que también durante este período de tiempo Coca-Cola experimentó más crisis que su rival PepsiCo.

A la vista de estos resultados, proponemos tres posibles mecanismos que hacen comprensible la relación entre velocidad y crisis. El primer mecanismo se relaciona con la miopía temporal *(temporal myopia)* (Miller, 2002). La velocidad puede llevar al límite las limitaciones cognitivas, inherentes al ser humano, de atención de los directivos y como consecuencia propiciar que las empresas se centren de forma excesiva en el presente sin poder prestar atención a las consecuencias futuras de sus acciones; lo que puede derivar en crisis. El segundo mecanismo también se deriva del desbordamiento de la capacidad de atención, que puede llevar a las empresas a obviar señales de su entorno competitivo que de haberlas observado e interpretado habrían evitado una crisis. Por último, el tercer mecanismo se relaciona con la capacidad de las empresas para aprender de crisis anteriores. El aprendizaje organizativo requiere tiempo

y atención (Berends y Antonacopoulou, 2014) y podría verse mermado por la velocidad, y ser ésta la razón por la que algunas crisis se repiten a lo largo del período de estudio.

El capítulo 3 desarrolla el trabajo que lleva por título ***"The Influence of Organizational Speed on Organizational Mishaps: The Moderating Role of Industry Dynamism."*** Tras la realización de este estudio, concluimos que la velocidad organizativa se relaciona de forma positiva con las crisis empresariales. Con base en una muestra de 331 empresas de Estados Unidos, las empresas con mayor velocidad (en términos de número de fusiones y adquisiciones y de alianzas estratégicas) son también las que experimentan más crisis empresariales de ámbito social (crisis relacionadas con la comunidad, la diversidad, las relaciones con los empleados, el medio ambiente, los derechos humanos, los productos, y el gobierno corporativo de la empresa).

Este resultado apoya la relación positiva entre velocidad y crisis que planteábamos en el primer trabajo basándonos en el estudio comparativo de las empresas Coca-Cola y PepsiCo. Además en este capítulo 3 desarrollamos con mayor detalle el argumento de las limitaciones cognitivas, en particular, de la habilidad limitada para procesar información (Simon, 1976; Miller, 1956). La velocidad organizativa deriva en ingentes cantidades de información y presión *(time pressure)*. Debido a la habilidad limitada para procesar información, los gerentes de las empresas utilizan mecanismos, heurísticas[2] *(heuristics)*, para economizar tiempo y procesar esa cantidad de información de forma más rápida (March y Simon, 1993). Aunque el uso de heurísticas ahorra tiempo, también puede dar lugar a sesgos *(biases)* y potencialmente derivar en crisis empresariales.

[2] Con el término heurísticas nos referimos a mecanismos, reglas simplificadas, que sirven de ayuda a los gerentes para procesar información y tomar decisiones de forma más rápida (Bazerman, 2006; Schwenk, 1996). Un ejemplo de heurística consiste en no considerar detenidamente todas las alternativas en la toma de decisiones (Benson y Beach, 1996).

Otro resultado relevante de este trabajo se refiere al papel moderador del dinamismo industrial. Nuestros resultados muestran que la relación positiva entre la velocidad organizativa, medida como número de alianzas estratégicas, y las crisis empresariales es más intensa en entornos dinámicos que en entornos con niveles bajos o moderados de dinamismo. Este resultado es especialmente relevante si tenemos en consideración las características de los entornos competitivos en los que operan actualmente las empresas: extraordinariamente dinámicos, denominados en terminología anglosajona como *high-velocity environments* (Eisenhardt, 1989). En estos entornos, en los que en la literatura académica y de gestión ha imperado la velocidad organizativa como requisito para que las empresas sigan siendo competitivas (D'Aveni, 1994; Vinton, 1992), nuestros resultados alumbran que las empresas con mayor velocidad organizativa son también más vulnerables a experimentar crisis.

Si bien el dinamismo tiene un efecto moderador positivo en la relación entre alianzas y crisis, este efecto moderador no se corrobora en el caso de las fusiones y adquisiciones. Es decir, la moderación del dinamismo en la relación entre velocidad, medida como número de fusiones y adquisiciones, y crisis no es estadísticamente significativa en nuestra muestra de empresas. Esta falta de significación en la hipótesis planteada podría deberse a que las fusiones y adquisiciones son muy complejas, implican multitud de decisiones y los miembros de la empresa precisan tiempo y atención suficientes para que la gestión de estos procesos estratégicos se lleve a cabo con éxito. Cuando una empresa se involucra en una rápida sucesión de fusiones y adquisiciones las limitaciones cognitivas podrían verse excedidas, conduciendo al uso de heurísticas y potencialmente resultando en crisis, con independencia del dinamismo del entorno.

El capítulo 4 presenta el trabajo cuyo título es ***"The Influence of Organizational Speed on Corporate Environmental Performance."*** Los resultados de este artículo evidencian que el efecto de la velocidad en el desempeño medioambiental de la empresa varía en función del nivel de velocidad. Por tanto, la relación entre la velocidad y el desempeño medioambiental no es lineal sino curvilínea. En concreto, nuestros resultados muestran una relación cuadrática, con forma de U invertida. La forma de U invertida indica que niveles moderados de velocidad, tanto en número de fusiones y adquisiciones como en número de alianzas estratégicas, contribuyen a mejorar el desempeño medioambiental de la empresa. Sin embargo, cuando el número de fusiones y adquisiciones o alianzas es elevado, hay un punto de inflexión, a partir del cual el efecto de la velocidad en el desempeño medioambiental es negativo. Este resultado muestra la complejidad de la relación entre la velocidad organizativa y el desempeño medioambiental de la empresa.

## 5.3 Implicaciones del Trabajo de Investigación

### 5.3.1 Implicaciones Académicas

Desde el punto de vista académico, los trabajos que han estudiado los efectos de la velocidad organizativa en resultados empresariales distintos al desempeño financiero han sido muy limitados, aunque se pueden destacar algunas excepciones (p. ej., Bansal, 2003; Forbes, 2005; Perlow, Okhuysen, y Repenning, 2002; Slawinski y Bansal, 2012). De forma global, esta tesis contribuye a extender las conclusiones de estos trabajos previos planteando y verificando de forma empírica, la influencia de la velocidad organizativa en las crisis empresariales y en el desempeño medioambiental de la empresa.

De forma particular, nuestro trabajo de investigación contribuye a identificar la velocidad organizativa como una de las posibles causas de las crisis empresariales. Algunos estudios previos han mencionado aspectos de la velocidad en relación con las crisis empresariales (p. ej., Greening y Johnson, 1996; Salter, 2013). Sin embargo, en estos estudios previos la noción de velocidad organizativa, que tiene un potente poder explicativo en conexión con las crisis empresariales, no ha sido articulada. Para explicar la relación entre velocidad y crisis nos basamos en la perspectiva de la cognición gerencial *(managerial cognitive perspective)* que toma las limitaciones cognitivas, inherentes al ser humano, como punto de partida. Estudios previos han mostrado la relación entre las limitaciones cognitivas y las crisis empresariales (p. ej., Chatterjee y Hambrick, 2007; Halpern, 1989; Mishina et al., 2010; Turner, 1976; Weick, 1988, 1989; Weitzel y Jonsson 1989). Nuestro trabajo complementa esta literatura ya que argumentamos que la velocidad puede llevar al límite las capacidades de atención (capítulo 2) y de procesamiento de información (capítulo 3) propiciando el uso de heurísticas que pueden resultar en crisis.

La metodología cuantitativa y con datos longitudinales, aplicada en el segundo trabajo (capítulo 3) para estudiar las crisis organizativas, también representa una contribución relevante ya que este tipo de análisis son escasos en la literatura de crisis y en su mayoría de corte transversal (p. ej., Greening y Johnson, 1996; Hill et al., 1992; Mckendall y Wagner, 1997; Kesner, Victor, y Lamont, 1986). Por tanto, el trabajo de investigación realizado representa un paso importante en proporcionar evidencia cuantitativa para explicar una amplia variedad de crisis de tipo social en una muestra extensa de empresas. Además, en el análisis incorporamos varias industrias lo que nos ha permitido identificar el dinamismo industrial como uno de los factores que intensifican la relación entre velocidad y crisis empresariales. En contraste con estudios

previos, que asumían que la velocidad es un atributo positivo de la empresa (D'Aveni, 1994; Vinton, 1992), nuestros resultados muestran que la velocidad también tiene su lado negativo.

Nuestro trabajo también contribuye a identificar uno de los determinantes a nivel corporativo del desempeño medioambiental de la empresa. Junto a los principales determinantes contenidos en la literatura (para una revisión detallada véase Etzion, 2007), nuestro trabajo desvela el potencial de la velocidad organizativa para mejorar el desempeño medioambiental de la empresa pero también, en función de cuál sea el nivel de velocidad, para deteriorarlo. Estudios previos sobre el efecto de la velocidad en resultados de la empresa distintos al desempeño financiero apuntan de forma implícita a una relación de U invertida (p. ej., Vermeulen y Barkema, 2002). Sin embargo, esta relación no ha sido verificada de forma empírica. Para explicar que la relación entre la velocidad organizativa y el desempeño medioambiental de la empresa tiene forma de U invertida nos apoyamos en el concepto de miopía temporal (Miller, 2002). Con este trabajo, en el que nos centramos en una de las dimensiones del tiempo *(time)*, la velocidad, contribuimos a reconocer, junto a un creciente grupo de investigadores, la importancia que tiene la consideración del tiempo en el comportamiento medioambiental de la empresa (p. ej., Bansal y DesJardine, 2014; Ortiz-de-Mandojana, 2011; Slawinski y Bansal, 2012).

### 5.3.2 Implicaciones para la Gestión

Además de las implicaciones académicas, de los resultados obtenidos en esta tesis doctoral se derivan también importantes implicaciones para la gestión de las empresas. A continuación detallamos las implicaciones prácticas más relevantes.

Los resultados del primer artículo (capítulo 2) apuntan la importancia del aprendizaje organizativo respecto a las crisis experimentadas por la empresa para evitar que las mismas crisis se repitan en el futuro. Puesto que el aprendizaje organizativo requiere tiempo y esfuerzo (Berends y Antonacopoulou, 2014), los directivos deben promover este aprendizaje dentro de la empresa. Para ello, los directivos pueden planificar tiempo para actividades orientadas al aprendizaje. Estas actividades pueden, por ejemplo, incluir reuniones en las que distintos miembros de la empresa puedan intercambiar su interpretación acerca de por qué una determinada crisis ocurrió. Entendiendo las causas subyacentes de una crisis, las empresas pueden aprender de esa experiencia y estar más preparadas para evitar que similares crisis vuelvan a ocurrir en el futuro (Rerup, 2009).

Los resultados obtenidos en el primer y segundo trabajos, en los que se relaciona la velocidad organizativa con las crisis empresariales, señalan la importancia de las limitaciones cognitivas, de atención y de procesamiento de información, en el uso de heurísticas (March y Simon, 1993) que puede derivar en crisis (p. ej., Chatterjee y Hambrick, 2007; Halpern, 1989; Mishina et al., 2010; Turner, 1976; Weick, 1988, 1989; Weitzel y Jonsson 1989). Por tanto, los directivos deben ser conscientes de estas limitaciones cognitivas y aplicar mecanismos que impidan, o al menos intenten contrarrestar, el uso de heurísticas en el análisis de información derivada de los procesos de fusiones y adquisiciones y alianzas estratégicas, y en la toma de decisiones. Algunos de estos mecanismos consisten en usar distintos marcos de referencia o plantear distintos escenarios y sus potenciales consecuencias en el análisis de problemas, también en considerar y valorar detenidamente los diferentes puntos de vista de los miembros de la organización incluso cuando estos puntos de vista puedan ser opuestos, y en usar modelos que guíen el análisis (Choo, 2008).

Los resultados obtenidos en el primer y segundo trabajos, también muestran que las empresas con mayor velocidad, son más vulnerables a experimentar crisis. Las empresas deben responder de forma ágil a los cambios de su entorno competitivo, como por ejemplo cambios en las preferencias de los consumidores o movimientos inesperados de competidores de la industria. Sin embargo, deben evitar los extremos, es decir, una velocidad excesiva y una velocidad excesivamente limitada, para evitar así también las consecuencias adversas que resultan de ambas situaciones límite. Las empresas que toman decisiones excesivamente rápido pueden caer en una trampa de la velocidad *(speed trap)* en la que los directivos prestan más atención a decidir con rapidez que al contenido de la decisión (Perlow et al., 2002). Por el contrario, empresas cuya velocidad es muy reducida pueden caer en la trampa de la lentitud *(slow trap)* en la que los directivos enfatizan la calidad del contenido de la decisión a expensas de la velocidad. Esta situación conduce a las empresas a invertir demasiado tiempo en la toma de decisiones y a perder oportunidades (Perlow et al., 2002). Por tanto, los directivos deben calibrar la velocidad organizativa en relación a los procesos estratégicos de fusiones y adquisiciones y alianzas estratégicas para evitar crisis empresariales.

Calibrar el nivel de velocidad no sólo es de extrema importancia para evitar crisis empresariales sino también para la sostenibilidad medioambiental. Los resultados obtenidos en el tercer trabajo, alumbran la importancia de sopesar los beneficios así como los costes para la sociedad de una velocidad organizativa incesante. Los directivos se enfrentan a fuertes presiones para conseguir elevados objetivos de crecimiento de la empresa. En ocasiones, recurren a procesos de fusiones y adquisiciones como mecanismo para alcanzar esos objetivos ya que sólo con los propios recursos y capacidades de la empresa no sería posible. Sin embargo, una velocidad organizativa excesiva a través de estos procesos puede tener consecuencias negativas para el medio

ambiente. De hecho, con frecuencia se percibe a las empresas como la causa de los problemas medioambientales, pero las empresas son también parte de la solución a estos problemas (Hoffman y Bansal, 2012). La velocidad organizativa está en manos de los directivos. Por tanto, los directivos deberían plantear objetivos de crecimiento que no lleven a comprometer el desempeño medioambiental de la empresa. Deberían gestionar aquel nivel de velocidad que les permita ser parte de la solución de la sostenibilidad medioambiental, a través de la mejora de su desempeño medioambiental.

## 5.4 Limitaciones del Trabajo de Investigación

Este trabajo de investigación no queda exento de limitaciones. A continuación, indicamos las más importantes en relación a la naturaleza de las muestras objeto de estudio y la generalización de los resultados, las medidas de las variables utilizadas, los factores de contingencia estudiados, el tipo de estudio empírico (longitudinal *vs.* transversal), y por último, en relación a la observación de los mecanismos que explican algunas de las hipótesis planteadas.

Respecto a la naturaleza de las muestras objeto de estudio y la generalización de los resultados: el trabajo presentado en el capítulo 2 se basa en el estudio de caso de dos empresas. Este tipo de estudios son valiosos y contribuyen de forma significativa a la literatura ya que permite estudiar en profundidad y con gran nivel de detalle el fenómeno objeto de estudio. De forma paralela, estos estudios conllevan también una limitación en cuanto a la verificación de la relación planteada y a la generalización de los resultados obtenidos. Para mitigar esta limitación, y dotar de rigurosidad y robustez a nuestras conclusiones, el segundo artículo, presentado en el capítulo 3, se articula como una extensión cuantitativa de este primer trabajo. En este segundo artículo, la muestra está constituida por 331 empresas de Estados Unidos incluidas en S&P 500. De

forma similar, en el tercer trabajo de investigación, presentado en el capítulo 4, utilizamos una muestra de 427 empresas también americanas y de gran tamaño. Por tanto, los resultados que hemos obtenido no serían extensibles a pequeñas y medianas empresas. Adicionalmente, existen diferencias culturales en cómo las empresas perciben el tiempo, que se reflejan en su comportamiento (Levine, West, y Reis, 1980) y podrían también reflejarse en la velocidad organizativa. Por tanto, nuestros resultados deben ser tomados con precaución a la hora de hacer extensibles nuestras conclusiones a empresas de otros países.

Respecto a las medidas de las variables utilizadas: en los tres trabajos de investigación hemos medido la velocidad organizativa en relación a los procesos estratégicos de fusiones y adquisiciones y alianzas estratégicas. Adicionalmente, en el primer artículo incluimos también como medidas de velocidad la rotación de CEOs y el volumen de acciones comercializadas. Estas son algunas variables indicativas de la velocidad de la empresa pero no son exhaustivas. La velocidad organizativa puede también medirse a través del número de innovaciones en productos (p. ej., Atuahene-Gima, 2003; Kessler y Chakrabarti, 1996), la actividad de expansión internacional (Vermeulen y Barkema, 2002) o la velocidad de respuesta de la empresa (p. ej., Más-Ruiz, Nicolau-Gónzalbez, y Ruiz-Moreno, 2005).

En cuanto a la medida del número de crisis empresariales en el estudio de caso contenido el capítulo 2, ésta se deriva de un análisis minucioso de las noticias sobre estas empresas publicadas en el periódico *The Wall Street Journal* (WSJ) durante el período 2000-2010. Este análisis podría verse sesgado por la mayor visibilidad de Coca-Cola frente a Pepsi. Mayor visibilidad podría implicar también una mayor cobertura de noticias y por esta razón traducirse en un mayor número de crisis. Con el objetivo de

mitigar esta limitación, utilizamos también en este trabajo la base de datos KLD Research & Analytics (KLD). Comparando el número de *KLD concerns* (aspectos de irresponsabilidad social de la empresa que son consistentes con nuestra definición de crisis) con el número de crisis resultantes del análisis de noticias en el periódico WSJ, ambas medidas conducen a las mismas conclusiones.

Respecto a los factores de contingencia analizados: en el capítulo 3 analizamos la influencia del dinamismo del entorno en la relación entre velocidad organizativa y crisis empresariales. Esta aportación es importante debido a las implicaciones que tiene el dinamismo en los procesos cognitivos y que magnifica el efecto de la velocidad sobre las crisis. Sin embargo, el dinamismo es sólo uno de los aspectos que caracterizan al entorno de una empresa. Otros aspectos como la complejidad del entorno o el número de competidores en la industria podrían también condicionar esta relación.

Respecto al tipo de estudio (longitudinal *vs*. transversal): el análisis empírico del artículo presentado en el capítulo 4, que relaciona la velocidad organizativa con el desempeño medioambiental de la empresa, es de corte transversal. Los datos de corte transversal impiden analizar la evolución de las variables a lo largo del tiempo, lo que podría suscitar dudas razonables acerca de la causalidad de las relaciones planteadas. Para mitigar este efecto, utilizamos las variables independientes retrasadas un año respecto a la variable dependiente. No obstante, en este sentido nuestros resultados deben ser interpretados con cierta precaución.

Por último, respecto a la observación de los mecanismos que explican las hipótesis planteadas: en el caso de estudio presentado en el capítulo 2 proponemos, de forma inductiva y a partir de los resultados del análisis cualitativo, tres mecanismos que explican por qué la velocidad organizativa puede llevar a que las empresas

experimenten crisis. Sin embargo, en este estudio no tuvimos oportunidad de realizar trabajo de campo en las empresas y observar directamente estos mecanismos. De forma similar, en el trabajo presentado en el capítulo 3 argumentamos que el uso de heurísticas puede conducir a sesgos y potencialmente derivar en una crisis, pero no hemos observado directamente el uso de estas heurísticas en las empresas de la muestra. Tanto en el capítulo 2 como en el capítulo 3, nuestra argumentación se fundamenta en la evidencia empírica y teórica de la literatura.

## 5.5 Futuras Líneas de Investigación

Los resultados que hemos obtenido en este trabajo de investigación alumbran oportunidades para continuar profundizando en el estudio de las relaciones entre la velocidad y los resultados organizativos. Sugerimos, a continuación, algunas líneas de investigación para futuros trabajos.

En estudios futuros resultaría de gran interés utilizar una muestra de empresas de distintos países con el objetivo de poder captar posibles diferencias culturales en la percepción del tiempo (Levine, West, y Reis, 1980) que podrían verse reflejadas en el comportamiento de las empresas, y por tanto, también en la velocidad organizativa. Sería igualmente interesante contrastar las relaciones planteadas en este trabajo utilizando una muestra de pequeñas y medianas empresas.

Sería interesante analizar si diferentes facetas de la velocidad influyen también de forma diferente en las crisis empresariales y en el desempeño medioambiental de la empresa. Para ello, futuros trabajos podrían estudiar el efecto de la velocidad a través de medidas distintas a las que hemos utilizado en esta investigación (i.e., número de fusiones y adquisiciones y número de alianzas estratégicas). Posibles variables que

reflejan velocidad podrían incluir el número de innovaciones en productos (p. ej., Atuahene-Gima, 2003; Kessler y Chakrabarti, 1996) o la actividad de expansión internacional de la empresa (Vermeulen y Barkema, 2002).

Así también planteamos el interés de estudiar los factores que pueden condicionar el efecto de la velocidad sobre las crisis y sobre el desempeño medioambiental de la empresa. En el capítulo 2, analizamos el efecto moderador del dinamismo del entorno. Otras características del entorno como la complejidad o el número de competidores en la industria podrían también ejercer un efecto moderador en las relaciones planteadas. Adicionalmente, las empresas suelen operan en varios entornos simultáneamente, por ejemplo cuando una empresa establecida entra en un nuevo mercado (Eisenhardt, Furr, y Bingham, 2010). Estudiar cómo afecta la complejidad del entorno, el número de competidores en la industria y otras posibles variables contingentes sería una contribución relevante para profundizar en la comprensión de los efectos de la velocidad sobre los resultados de la empresa.

La base de nuestros argumentos en la relación entre velocidad y crisis se articula en base a las limitaciones cognitivas inherentes al ser humano, y por tanto inherentes a los gerentes de las empresas, que pueden verse desbordadas con la velocidad de los procesos estratégicos (fusiones y adquisiciones y alianzas estratégicas) y propiciar el uso de heurísticas. Esfuerzos en identificar el tipo de heurísticas que entran en juego sería muy interesante, especialmente desde el punto de vista de la gestión para poder articular mecanismos que mitiguen su efecto e incluso evitar que deriven en crisis empresariales.

Finalmente, sería también de gran interés realizar un análisis longitudinal de la relación entre velocidad organizativa y desempeño medioambiental con la finalidad de

analizar la evolución de las variables a lo largo del tiempo y dotar de mayor solidez a las conclusiones que hemos obtenido en el tercer trabajo.

## 5.6 Bibliografía Utilizada en el Capítulo

Atuahene-Gima, K. 2003. The effects of centrifugal and centripetal forces on product development speed and quality: How does problem solving matter? ***Academy of Management Journal,*** 46: 359–373.

Bansal, P. 2003. From issues to actions: the importance of individual concerns and organizational values in responding to natural environmental issues. ***Organization Science,*** 5: 510–527.

Bansal, P., y DesJardine, M. 2014. Business sustainability: It is about time. ***Strategic Organization,*** 12: 70–78.

Bazerman, M. H. 2006. ***Judgement in Managerial Decision Making***. New York: Wiley.

Benson, L., & Beach, L. R. 1996. The effects of time constraints on the pre-choice screening of the decision options. ***Organizational Behavior and Human Decision Processes,*** 67: 222–228.

Berends, H., y Antonacopoulou, E. 2014. Time and organizational learning: A review and agenda for future research. ***International Journal of Management Reviews,*** 16: 437–453.

Chatterjee, A., y Hambrick, D. C. 2007. It's all about me: Narcissistic chief executive officers and their effects on company strategy and performance. ***Administrative Science Quarterly,*** 52: 351–386.

Choo, C. W. 2008. Emerald Article: Organizational disasters: why they happen and how they may be prevented. ***Management Decision,*** 47: 32–45.

D'Aveni, R. 1994. ***Hypercompetition: Managing the Dynamics of Strategic Maneuvering.*** New York: The Free Press.

Eisenhardt, K. M. 1989. Building theories from case study research. ***Academy of Management Review,*** 14: 532–550.

Eisenhardt, K. M., Furr, N. R., y Bingham, C. B. 2010. Microfoundations of performance: Balancing efficiency and flexibility in dynamic environments. ***Organization Science,*** 21: 1263–1275.

Etzion, D. 2007. Research on organization and the natural environment, 1992-present: A review. ***Journal of Management,*** 33: 637–664.

Forbes, D. P. 2005. Managerial determinants of decision speed in new ventures. ***Strategic Management Journal,*** 26: 355–366.

Greening, D. W., y Johnson, R. A. 1996. Do managers and strategies matter? A study in crisis. ***Journal of Management Studies,*** 33: 25–51.

Halpern, J. J. 1989. Cognitive factors influencing decision making in a highly reliable organization. ***Organization & Environment,*** 3: 143–158.

Hill, C. W. L., Kelley, P. C., Agle, B. R., Hitt, M. A., y Hoskisson, R. E. 1992; An empirical examination of the causes of corporate wrongdoing in the United States. ***Human Relation,*** 45: 1055–1076.

Hoffman, A. J., y Bansal, P. 2012. ***Retrospective, Perspective, and Prospective: Introduction to the Oxford Handbook on Business and the Natural Environment***. In Bansal, P. & Hoffman, A. J. (Eds.), The Oxford Handbook of Business and the Natural Environment (1st ed.). Oxford: University Press, Oxford.

Kesner, B., Victor, B., y Lamont, B. T. 1986. Board composition and the commission of illegal acts: An investigation of Fortune 500 companies. ***Academy of Management Journal,*** 29: 789–799.

Kessler, E. H., y Chakrabarti, A. K. 1996. Innovation speed: A conceptual model of context, antecedents, and outcomes. ***Academy of Management Review,*** 21: 1143–1191.

Levine, R. V., West, L., y Reis, H. 1980. Perceptions of time and punctuality in the United States and Brazil. ***Journal of Personality and Social Psychology,*** 38: 541–550.

March, H., y Simon, H. 1993. ***Organizations*** (2nd ed.). Cambridge: Blackwell Publishers.

Más-Ruiz, F. J., Nicolau-Gonzálbez, J. L., y Ruiz-Moreno, F. 2005. Asymmetric rivalry between strategic groups: Response, speed of response and ex ante vs. ex post competitive interaction in the Spanish bank deposit market. ***Strategic Management Journal,*** 26: 713–745.

Mckendall, M. A., y Wagner, J. A. 1997. Motive, opportunity, choice and corporate illegality. ***Organization Science,*** 8: 624–647.

Miller, G. A. 1956. The magic number seven plus or minus two: Some limits on our capacity for processing information. ***Psychological Review,*** 64: 81–97.

Miller, K. D. 2002. Knowledge inventories and managerial myopia. ***Strategic Management Journal,*** 23: 689–706.

Mishina, Y., Dykes, B. J., Block, E. S., y Pollock, T. G. 2010. Why "good" firms do bad things: the effects of high aspirations, high expectations, and prominence on the incidence of corporate illegality. ***Academy of Management Journal,*** 53: 701–722.

Ortiz-de-Mandojana, N. 2011. ***Gobierno Corporativo y Planteamiento Medioambiental de la Empresa.*** Granada: Editorial de la Universidad de Granada.

Pearson, C. M., & Clair, J. A. 1998. Reframing crises management. ***Academy of Management Review,*** 23: 59–76.

Perlow, L. A., Okhuysen, G. A., y Repenning, N. P. 2002. The speed trap: Exploring the relationship between decision making and temporal context. ***Academy of Management Journal,*** 45: 931–955.

Rerup, C. 2009. Attentional triangulation: Learning from unexpected care Crises. ***Organization Science,*** 20: 876–893.

Salter, M. S. 2013. Short-termism at its worst: How short-termism invites corruption... And what to do about it? ***Edmond J. Safra Research Lab Working Papers,*** 5: 1–70.

Simon, H. A. 1976. ***Administrative Behavior.*** New York: Macmillan.

Schwenk, C. H. 1996. Information, cognitive biases, and commitment to a course of action. ***Academy of Management Review,*** 11: 298–310.

Slawinski, N., y Bansal, P. 2012. A matter of time: the temporal perspectives of organizational responses to climate change. ***Organization Studies,*** 33: 1537–1563.

Turner, B. A. 1976. The Organizational and interorganizational development of disasters. ***Administrative Science Quarterly,*** 21: 378–397.

Vermeulen, F., y Barkema, H. 2002. Pace, rhythm, and scope: Process dependence in building a profitable multinational corporation. ***Strategic Management Journal,*** 23: 637–653.

Vinton, D. 1992. A new look at time, speed, and the manager. ***Academy of Management Executive,*** 6: 7–16.

Weick, K. E. 1988. Enacted sensemaking in crisis situations. ***Journal of Management Studies,*** 25: 305–317**.**

Weick, K. E. 1989. Mental models of high reliability systems. ***Industrial Crisis Quarterly,*** 3: 127–142.

Weitzel, W., y Jonsson, E. 1989. Decline in organizations: A literature integration and extension. ***Administrative Science Quarterly,*** 34: 91–109.

# BIBLIOGRAFÍA

Aiken L. S., & West, S. G. 1991. ***Multiple Regression: Testing and Interpreting Interactions*.** Sage: Newbury Park, CA.

Anand, B. N., & Khanna, T. 2000. Do firms learn to create value? The case of alliances. ***Strategic Management Journal,*** 21: 295–315.

Anton, W. R. Q., Deltas, G., & Kahnna, M. 2004. Incentives for environmental self-regulation and implications for environmental performance. ***Journal of Environmental Economics and Management,*** 48: 632–654.

Antonacopoulou, E. P., & Sheaffer, Z. 2014. Learning in crisis: Rethinking the relationship between organizational learning and crisis management. ***Journal of Management Inquiry,*** 23: 5–21.

Aragón-Correa, J. A. 1998. Strategic proactivity and firm approach to the natural environment. ***Academy of Management Journal,*** 41: 556–567.

Aragón-Correa, J. A., Hurtado-Torres, N., Sharma, S., & García-Morales, V. 2008. Environmental strategy and performance in small firms: A resource-based perspective. ***Journal of Environmental Management,*** 86: 88–103.

Aragón-Correa, J. A., y Sharma, S. 2003. A contingent resource-based view of proactive corporate environmental strategy. ***Academy of Management Review,*** 28: 71–88.

Arlidge, J. 2004. Don't Drink the Water. ***The Guardian***. Last accessed March 23, 2014. *http://www.theguardian.com/lifeandstyle/2004/apr/18/foodanddrink.*

Arnocky, S., Milfont, T. L., & Nicol, J. 2014. Time perspective and sustainable behavior: Evidence for the distinction between consideration of immediate and future consequences. ***Environment and Behavior,*** 46: 556–582.

Arora, S., & Cason, T. N. 1996. Why do firms volunteer to exceed environmental regulations? Understanding participation in EPA's 33/50 program. ***Land Economics,*** 72: 413–432.

Atuahene-Gima, K. 2003. The effects of centrifugal and centripetal forces on product development speed and quality: How does problem solving matter? ***Academy of Management Journal,*** 46: 359–373.

Azzone, G., & Noci, G. 1996. Measuring the environmental performance of new products: An integrated approach. ***International Journal of Production Research,*** 34: 3055–3078.

Bansal, P. 2003. From issues to actions: The importance of individual concerns and organizational values in responding to natural environmental issues. ***Organization Science,*** 14: 510–527.

Bansal, P. 2005. Evolving sustainably: A longitudinal study of corporate sustainable development. ***Strategic Management Journal,*** 26: 197–218.

Bansal, P., & DesJardine, M. 2014. Business sustainability: It is about time. ***Strategic Organization,*** 12: 70–78.

Bansal, P., & Roth, K. 2000. Why companies go green: A model of ecological responsiveness. ***Academy of Management Journal,*** 43: 717–736.

Barkema, H. G., Baum J. A., & Mannix, E. A. 2002. Management challenges in a new time. ***Academy of Management Journal,*** 45: 916–930.

Barla, P. 2007. ISO 14001 certification and environmental performance in Quebec's pulp and paper industry. ***Journal of Environmental Economics and Management,*** 53: 291–306.

Barney, J. B. 1995. Looking inside for competitive advantage. ***Academy of Management Executive,*** 9: 49–61.

Baron, R. A. 1998. Cognitive mechanisms in entrepreneurship: why and when entrepreneurs think differently than other people. ***Journal of Business Venturing,*** 13: 275–294.

Baron, R. A., & Tang, J. 2011. The role of entrepreneurs in firm-level innovation: Joint effects of positive affect, creativity, and environmental dynamism. ***Journal of Business Venturing,*** 26: 49–60.

Baucus, M. 1994. Pressure, opportunity and predisposition: A multivariate model of corporate illegality. ***Journal of Management,*** 20: 699–721.

Baucus, M. S., & Baucus, D. A. 1997. Paying the piper: An empirical examination of longer-term financial consequences of illegal corporate behavior. ***Academy of Management Journal,*** 40: 129–151.

Baucus, M. S., & Near, J. P. 1991. Can illegal corporate behavior be predicted? An event history analysis. ***Academy of Management Journal,*** 34: 9–36.

Bauer, F., & Matzler, K. 2014. Strategic complementarity, cultural fit, and degree and speed of integration. ***Strategic Management Journal,*** 35: 269–291.

Baum, J. R., & Wally, S. 2003. Strategic decision speed and firm performance. ***Strategic Management Journal,*** 24: 1107–1129.

Bazerman, M. H. 2006. ***Judgement in Managerial Decision Making***. New York: Wiley.

Bazerman, M. H., & Hoffman, A. J. 1999. Sources of environmentally destructive behavior: Individual, organizational and institutional perspectives. ***Research in Organizational Behavior,*** 21: 39–79.

Beck, N., & Katz, J. 1995. What to do (and not to do) with time-series cross-section data. ***American Political Science Review,*** 89: 634–647.

Beck, T. E., & Plowman, D. A. 2009. Experiencing rare and unusual events richly: The role of middle managers in animating and guiding organizational interpretation. ***Organization Science,*** 20: 909–924.

Benson, L., & Beach, L. R. 1996. The effects of time constraints on the pre-choice screening of the decision options. ***Organizational Behavior and Human Decision Processes,*** 67: 222–228.

Berends, H., & Antonacopoulou, E. 2014. Time and organizational learning: A review and agenda for future research. ***International Journal of Management Reviews,*** 16: 437–453.

Bingham, C. B., Eisenhardt, K. M., & Furr, N. R. 2007. What makes a process a capability? Heuristics, strategy, and effective capture of opportunities. ***Strategic Entrepreneurship Journal,*** 27: 27–47.

Bluedorn, A. C. 2002. ***The Human Organization of Time***. Stanford: Stanford University Press.

Boiral, O., & Henri, J. 2012. Modelling the impact of ISO 14001 on environmental performance: A comparative approach. ***Journal of Environmental Management,*** 99: 84–97.

Buysse, K., & Verbeke, A. 2003. Proactive environmental strategies: A stakeholder management perspective. ***Strategic Management Journal,*** 24: 453–470.

Canon-de-Francia, J., Garces-Ayerbe, C., & Ramírez-Alesón, M. 2007. Are more innovative firms less vulnerable to new environmental regulation? ***Environmental & Resource Economics,*** 36:295–311.

Carpenter, M. A., Pollock, T. G., & Leary, M. M. 2003. Testing a model of reasoned risk-taking: Governance, the experience of principals and agents, and global strategy in high-technology IPO firms. ***Strategic Management Journal,*** 24: 803–820.

Carrión-Flores, C. E., & Innes, R. 2010. Environmental innovation and environmental performance. ***Journal of Environmental Economics and Management,*** 59: 84–97.

Carroll, A. 1979. A three-dimensional conceptual model of corporate performance. ***Academy of Management Review,*** 4: 497–505.

Castrogiovanni, G. J. 2002. Organization task environments: Have they changed fundamentally over time. ***Journal of Management,*** 28: 129–150.

Chao, Y. 2011. Decision-making biases in the alliance life cycle Implications for alliance failure. ***Management Decision,*** 49: 350–364.

Chatterjee, A., & Hambrick, D. C. 2007. It's all about me: Narcissistic chief executive officers and their effects on company strategy and performance. ***Administrative Science Quarterly,*** 52: 351–386.

Chatterji, A. K., Levine, D. I., & Toffel, M. W. 2009. How well do social ratings actually measure corporate social responsibility? ***Journal of Economics & Management Strategy,*** 18: 125–169.

Cho, C. H., & Patten, D. M. 2007. The role of environmental disclosures as tools of legitimacy: A research note. ***Accounting, Organizations and Society,*** 32: 639–647.

Choo, C. W. 2008. Emerald Article: Organizational disasters: why they happen and how they may be prevented. ***Management Decision,*** 47: 32–45.

Christmann, P. 2000. Effects of "best practices" of environmental management on cost competitiveness: The role of complementary assets. ***Academy of Management Journal,*** 43: 663–680.

Christmann, P. 2004. Multinational companies and the natural environment: Determinants of global environmental policy standardization. ***Academy of Management Journal,*** 47: 747–760.

Clarkson, M. B. E. 1995. A stakeholder framework for analyzing and evaluating corporate social performance. ***Academy of Management Review,*** 20: 92–117.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. 2003. ***Applied Multiple Regression/Correlation Analysis for the Behavioral Sciences***. Mahwah, NJ: Erlbaum.

Corral-Verdugo, V., Fraijo-Sing, B., & Pinheiro, J. Q. 2006. Sustainable behavior and time perspective: Present, past, and future orientations and their relationship with water conservation behavior. ***Interamerican Journal of Psychology,*** 40: 139–147.

Cowell, A. 2004. Coke Recalls Bottled Water Newly Introduced to Britain. ***The New York Times.*** Last accessed March 23, 2014. *http://www.nytimes.com/2004/03/20/business/international-business-coke-recalls-bottled-water-newly-introduced-to-britain.html?n=Top%2fReference%2fTimes%20Topics%2fSubjects%2fW%2fWater.*

D'Aveni, R. 1994. ***Hypercompetition: Managing the dynamics of strategic maneuvering.*** New York: The Free Press.

Daboub, A. J., Rasheed, A. M. A., Priem, R. L., & Gray, D. A. 1995. Top management Team characteristics and corporate illegal activity. ***Academy of Management Review,*** 20: 138–170.

Das, T. K. 2006. Strategic alliance temporalities and partner opportunism. ***British Journal of Management,*** 17: 1–21.

Davidson, W. N., Worrell, D., & Cheng, L. T. W. 1994. The effectiveness of OSHA penalties: A stock-market-based test. ***Industrial Relations,*** 33: 283–296.

DeCelles, K. A., & Pfarrer, M. D. 2004. Heroes or villains? Corruption and the charismatic leader. ***Journal of Leadership & Organizational Studies,*** 11: 67–77.

Deckop, J., Merriman, K., & Gupta, S. 2006. The effects of CEO pay structure on corporate social performance. ***Journal of Management,*** 32: 329–342.

Delmas, M. 2001. Stakeholders and competitive advantage: The case of ISO 14001. ***Production and Operations Management,*** 10: 343–358.

Delmas, M., & Montiel, I. 2008. The diffusion of voluntary international management standards: Responsible care, ISO 9000 and ISO 14001 in the chemical industry. ***Policy Studies Journal,*** 36: 65–93

Delmas, M., & Montiel, I. 2009. Greening the supply chain: When is customer pressure effective? ***Journal of Economics & Management Strategy,*** 18: 171–201.

Dess, G. G., & Beard, D. W. 1984. Dimensions of organizational task environments. ***Administrative Science Quarterly,*** 29: 52–73.

Dierickx, I., Cool, K. 1989. Asset stock accumulation and sustainability of competitive advantage. ***Management Science,*** 35: 1504–1514.

Dorata, N. T. 2012. Determinants of the strengths and weaknesses of acquiring firms in mergers and acquisitions: A stakeholder perspective. ***International Journal of Management,*** 29: 578–590.

Eisenhardt, K. 1989. Making fast strategic decisions in high-velocity environments. ***Academy of Management Journal,*** 32: 543–576.

Eisenhardt, K. M., & Martin, J. A. 2000. Dynamic capabilities: What are they? ***Strategic Management Journal,*** 21: 1105–1121.

Eisenhardt, K. M., Furr, N. R., & Bingham, C. B. 2010. Microfoundations of performance: Balancing efficiency and flexibility in dynamic environments. ***Organization Science,*** 21: 1263–1275.

Etzion, D. 2007. Research on organization and the natural environment, 1992-present: A review. ***Journal of Management,*** 33: 637–664.

Fombrun, C. 1996. ***Reputation: Realizing Value from the Corporate Image***. Cambridge: Harvard Business School Press.

Forbes D. P. 2005. Managerial determinants of decision speed in new ventures. ***Strategic Management Journal,*** 26: 355–366.

Freeman, R. E. 1984. ***Strategic Management: A Stakeholder Approach.*** Boston: Pitman/Ballinger.

Froot, K. 1989. Consistent covariance matrix estimation with cross-sectional dependence and heteroskedasticity in financial data. ***Journal of Financial and Quantitative Analysis,*** 24: 333–355.

Fubini, D. 2000. After the merger. ***The McKinsey Quarterly,*** 4: 4–5.

Galasso, A., & Simcoe, T. S. 2011. CEO overconfidence and innovation. ***Management Science,*** 57: 1469–1484.

Gioia, D. A. 1986. ***Conclusion: The State of the Art in Organizational Social Cognition: A Personal View.*** In H. P. Sims and D. A. Gioia (Eds.), The Thinking Organization: Dynamics of Organizational Social Cognition. San Francisco: Jossey-Bass.

Grant, R. M. 1991. The resource-based theory of competitive advantage: Implications for strategy formulation. ***California Management Review,*** 33: 114–135.

Graves, S., & Waddock, S. A. 1994. Institutional owners and corporate social performance. ***Academy of Management Journal,*** 37: 1034–1046.

Green, S. 2011. Coca-Cola's CEO on Doubling the Size of his Company. ***Harvard Business Review***. Last accessed March 23, 2014. *http://blogs.hbr.org/2011/09/coca-colas-ceo-on-doubling-the.*

Greening, D. W., & Johnson, R. A. 1996. Do managers and strategies matters? A study in crisis. ***Journal of Management Studies,*** 33: 25–51.

Griffin, J. J., & Mahon, J. F. 1997. The corporate social performance and corporate financial performance debate; twenty-five years of incomparable results. ***Business & Society,*** 36: 5–31.

Halpern, J. J. 1989. Cognitive factors influencing decision making in a highly reliable organization. ***Organization & Environment,*** 3: 143–158.

Harris, J., & Bromiley, P. 2007. Incentives to cheat: The influence of executive compensation and firm performance on financial misrepresentation. ***Organization Science,*** 18: 350–367.

Hart, S. L. 1995. A natural-resource-based view of the firm. ***Academy of Management Review,*** 20: 986–1014.

Hart, S. L., & Milstein, M. B. 1999. Global sustainability and the creative destruction of industries. ***Sloan Management Review,*** 41: 23–33.

Hart, S. L., & Sharma, S. 2004. Engaging fringe stakeholder for competitive imagination. ***Academy of Management Executive,*** 18: 7–18.

Haunschild, P. R., & Sullivan, B. N. 2002. Learning from complexity: effects of prior accidents and incidents on airlines' learning. ***Administrative Science Quarterly,*** 47: 609–643.

Henriques, I., & Sadorsky, P. 1999. The relationship between environmental commitment and managerial perceptions of stakeholder importance. ***Academy of Management Journal,*** 42: 87–99.

Hill, C. W. L., Kelley, P. C., Agle, B. R., Hitt, M. A., & Hoskisson, R. E. 1992. An empirical examination of the causes of corporate wrongdoing in the United States. ***Human Relations,*** 45: 1055–1076.

Hitt, M. A., Harrison, J. S., & Ireland, R. D. 2001. ***Mergers and Acquisitions: A Guide to Creating Value for Stakeholders.*** New York: Oxford University Press.

Hoffman, A. 1999. Institutional evolution and change: environmentalism and the U.S. chemical industry. ***Academy of Management Journal,*** 42: 351–372.

Hoffman, A. J., & Bansal, P. 2012. ***Retrospective, Perspective, and Prospective: Introduction to the Oxford Handbook on Business and the Natural Environment***. In Bansal, P., & Hoffman, A. J. (Eds.), The Oxford Handbook of Business and the Natural Environment (1st ed.). Oxford: University Press, Oxford.

Hoffman, A., & Georg, S. 2013. ***Introduction to Business and the Natural Environment. A History of Research on Business and the Natural Environment: Conversations from the Field.*** In Georg, S. & Hoffman, A. (Eds.), Business and the Environment: Critical Perspectives in Business and Management, Volume 1. Oxford, UK: Routledge.

Homburg, C., & Bucerius, M. 2006. Is speed of integration really a success factor of mergers and acquisitions? An analysis of the role of internal and external relatedness. ***Strategic Management Journal,*** 27: 347–367.

Honoré, C. 2004. ***In Praise of Slowness: Challenging the Cult of Speed.*** HarperCollins e-books.

Hynes, T., & Prasad, P. 1997. Patterns of "mock bureaucracy" in minting disasters: An analysis of the Westray coal mine explosion. ***Journal of Management Studies,*** 34: 601–623.

Isabella, L. A. 1990. Evolving interpretations as a change unfolds: How managers construe key organizational events. ***Academy of Management Journal,*** 33: 7–41.

Jayaraman, N., Khorana, A., Nelling, E., & Covin, J. 2000. CEO founder status and firm financial performance. ***Strategic Management Journal,*** 21: 1215–1224.

Jennings, P. D., & Zandbergen, P. A. 1995. Ecologically sustainable organizations: An institutional approach. ***Academy of Management Review,*** 20: 1015–1052.

Johnson R. A., & Greening, E. W. 1999**.** The effects of corporate governance and institutional ownership types on corporate social performance. ***Academy of Management Journal,*** 42: 564–576.

Judge, W. Q., & A. Miller. 1991. Antecedents and outcomes of decision speed in different environmental. ***Academy of Management Journal,*** 34: 449–463.

Kahn, W. A., Barton, M. A., & Fellows, S. 2013. Organizational crises and the disturbance of relational systems. ***Academy of Management Review,*** 38: 377–396.

Kassinis, G., & Vafeas, N. 2002. Corporate boards and outside stakeholders as determinants of environmental litigation. ***Strategic Management Journal,*** 23: 399–415.

Keats, B. W., & Hitt, M. A. 1988. A causal model of linkages among environmental dimensions, macro organizational characteristics, and performance. ***Academy of Management Journal,*** 31: 570–598.

Kesner, B., Victor, B., & Lamont, B. T. 1986. Board composition and the commission of illegal acts: An investigation of Fortune 500 companies. ***Academy of Management Journal,*** 29: 789–799.

Kessler, E. H., & Chakrabarti, A. K. 1996. Innovation speed: A conceptual model of context, antecedents, and outcomes. ***Academy of Management Review,*** 21: 1143–1191.

King, A. A., & Lenox, M. J. 2000. Industry self-regulation without sanctions: The chemical industry's responsible care program. ***Academy of Management Journal,*** 44: 698–716.

Klassen R. D., & McLaughlin, C. P. 1996. The impact of environmental management on firm performance. ***Management Science,*** 42: 1199–1214.

Klassen, R. D., & Vachon, S. 2003. Collaboration and evaluation in the supply chain: the impact on plant-level environmental investment. ***Production and Operations Management,*** 12: 336–352.

Klassen, R. D., & Whybark, D. C. 1999. The impact of environmental technologies on manufacturing performance. ***Academy of Management Journal,*** 42, 599–615.

Kleindorfer, P. R., & Saad, G. H. 2005. Managing disruption risks in supply chains. ***Production and Operations Management,*** 14: 53–68.

Kotha, R., Zheng, A., & George, G. 2011. Research notes and commentaries entry into new niches: The effects of firm age and the expansion of technological capabilities on innovative output and impact. ***Strategic Management Journal,*** 32: 1011–1024.

Kownatzki, M., Walter, J., Floyd, S. W., & Lechner, C. 2013. Corporate control and the speed of strategic business unit decision making. ***Academy of Management Journal,*** 56: 1295–1324.

Kunreuther, H., & Bowman, E. H. 1997. A dynamic model of organizational decision making: Chemco revisited six years after Bhopal. ***Organization science,*** 8: 404–413.

Laverty, K. J. 1996. Economic "short-termism": The debate, the unresolved issues, and the implications for management practice and research. ***Academy of Management Review,*** 21: 825–860.

Lenox, M. J., & King, A. A. 2004. Prospects for developing absorptive capacity through internal information provision. ***Strategic Management Journal,*** 25: 331–345.

Lenox, M. J., & Nash, J. 2003. Industry self-regulation and adverse selection: A comparison across four trade association programs. ***Business Strategy and the Environment,*** 12: 343–356.

Lepak, D. P., Takeuchi, R., & Snell, S. A. 2003. Employment flexibility and firm performance: examining the interaction effects of employment mode, environmental dynamism, and technological intensity. ***Journal of Management,*** 29: 681–703.

Levine, R. V., & Bartlett, K. 1984. Pace of life, punctuality and coronary heart disease in six countries. ***Journal of Cross-Cultural Psychology,*** 15: 23–255.

Levine, R. V., West, L., & Reis, H. 1980. Perceptions of time and punctuality in the United States and Brazil. ***Journal of Personality and Social Psychology,*** 38: 541–550.

Li, D., Eden, L., Hitt, M. A., Ireland, R. D., & Garrett, R. P. 2012. Governance in multilateral R&D alliances. ***Organization Science,*** 23: 1191–1210.

Lin, J. 2012. Cross-sector alliances for corporate social responsibility partner heterogeneity moderates environmental strategy outcomes. ***Journal of Business Ethics,*** 110: 219–229.

Lin, Z., Zhao, X., Ismail, K. M., & Carley, K. M. 2006. Organizational design and restructuring in response to crises: Lessons from computational modeling and real-world cases. ***Organization Science,*** 17: 598–675.

Madsen, P. M. 2009. These lives will not be lost in vain: organizational learning from disaster in U.S. coal mining. ***Organization Science,*** 20: 861–875.

Madsen, P. M., & Desai, V. 2010. Failing to learn? The effects of failure and success on organizational learning in the global orbital launch vehicle industry. ***Academy of Management Journal,*** 54: 451–476.

Majumdar, S. K., & Marcus, A. A. 2001. Rules versus discretion: The productivity consequences of flexible regulation. ***Academy of Management Journal,*** 44: 170–179.

Manner, M. H. 2010. The Impact of CEO Characteristics on corporate social performance. ***Journal of Business Ethics,*** 93:53–72.

March, H., & Simon, H. 1993. ***Organizations*** (2nd ed.). Cambridge: Blackwell Publishers.

March, J. G. 1999. Research on organizations: Hopes for the past and lessons from the future. ***Nordiske Organisasjonsstudier,*** 1: 69–83.

Más-Ruiz, F. J., Nicolau-Gonzálbez, J. L., & Ruiz-Moreno, F. 2005. Asymmetric rivalry between strategic groups: response, speed of response and ex ante vs. ex post competitive interaction in the Spanish bank deposit market. ***Strategic Management Journal,*** 26: 713–745.

McCall, M. W., & Kaplan, R. E. 1985. ***Whatever It Takes: Decision Makers at Work.*** Englewood Cliffs, NJ: Prentice-Hall, Inc.

McGrath, J. E., & Franziska, T. 2004. ***Temporal Matters in Social Psychology: Examining the Role of Time in the Lives of Groups and Individuals***. Washington, DC: American Psychological Association.

McKay, B. 2002. Coke to Pay Total of $8.1 Million in Back Salaries. ***Wall Street Journal,*** May 28: B16.

McKendall, M. A., & Wagner, J. A. 1997. Motive, opportunity, choice, and corporate illegality. ***Organization Science,*** 8: 624–647.

McWilliams, A., & Siegel, D. 2000. Corporate social responsibility and financial performance: Correlation or misspecification. ***Strategic Management Journal,*** 21: 603-609.

Miller, G. A. 1956. The magic number seven plus or minus two: Some limits on our capacity for processing information. ***Psychological Review,*** 64: 81–97.

Miller, K. D. 2002. Knowledge inventories and managerial myopia. ***Strategic Management Journal,*** 23: 689–706.

Mishina, Y., Dykes, B. J., Block, E. S., & Pollock, T. G. 2010. Why "good" firms do bad things: the effects of high aspirations, high expectations, and prominence on the incidence of corporate illegality. ***Academy of Management Journal,*** 53: 701–722.

Mitchell, R., Agle, B., & Wood, D. 1997. Toward a theory of stakeholder identifi cation and salience: Defi ning the principle of who and what really counts. ***Academy of Management Review,*** 22: 853– 886.

Mitroff, I, I., Pauchant, T., Finney, M., & Pearson, C. 1989. Do (some) organizations cause their own crises? The cultural profile of crisis-prone vs. crisis-prepared organizations. ***Industrial Crisis Quarterly,*** 3: 231–241.

Montiel, I., Husted, B., & Christmann, P. 2012. Using private management standard certification to reduce information asymmetries in corrupt environments. ***Strategic Management Journal,*** 33: 1103–1113.

Morse, D. 2002. Coke Rated "Acceptable" on Diversity - Task Force Overseeing Effort Criticizes Selection to Board Of Two White Executives. ***Wall Street Journal,*** September 26: A9.

Nadkarni, S., & Chen, J. 2014. Bridging yesterday, today, and tomorrow: CEO. Temporal focus, environmental dynamism, and rate of new product introduction. ***Academy of Management Journal,*** 57: 1810–1833.

Neisser, U. 1979. The concept of intelligence. ***Intelligence,*** 3: 217–227.

O'Brien, R. M. 2007. A Caution regarding rules of thumb for variance inflation factors. ***Quality & Quantity,*** 41: 673–690.

Ortiz-de-Mandojana, N. 2011. ***Gobierno Corporativo y Planteamiento Medioambiental de la Empresa.*** Granada: Ed. Universidad de Granada.

Ortiz-de-Mandojana, N., Aguilera-Caracuel, J., & Morales-Raya, M. Forthcoming. Corporate governance and environmental sustainability: The moderating role of the national institutional context. ***Corporate Social Responsibility and Environmental Management.***

Pauchant, T., & Mitroff, I. 1992. ***Transforming the crisis-prone organization***. San Francisco: Jossey-Bass.

Pearson, C. M. 2010. Dawn R. Gilpin and Priscilla J. Murphy: Crisis management in a complex world. ***Administrative Science Quarterly,*** 55: 170–171.

Pearson, C. M., & Clair, J. A. 1998. Reframing crises management. ***Academy of Management Review,*** 23: 59–76.

Pearson, C. M., & Mitroff, I. I. 1993. ***Academy of Management Executive,*** 7: 48–59.

Pearson, D. M., Roux-Dufort, C., & Clair, J. A. 2007. ***International Handbook of Organizational Crisis Management.*** Sage Publications.

PepsiCo Inc. 2007. Annual Report.

Perlow, L. A., Okhuysen, G. A., & Repenning, N. P. 2002. The speed trap: exploring the relationship between decision making and temporal context. ***Academy of Management Journal,*** 45: 931–955.

Perrow, C. 1984. ***Normal Accidents: Living with High-Risk Technologies.*** New York: Basic Books.

Peteraf, M. A. 1993. The cornerstones of competitive advantage: a resource –based view. ***Strategic Management Journal,*** 14: 179–191.

Porter, M. 1991. America's green strategy. ***Scientific American,*** 264: 168.

Porter, M. E., & Van Der Linde, C. 1995.Toward a new conception of the environment-competitiveness relationship. ***The Journal of Economic Perspectives,*** 9: 97–118.

Reinhardt, F. L. 1998. Environmental product differentiation: Implications for corporate strategy. ***California Management Review,*** 40: 43–73.

Rerup, C. 2009. Attentional triangulation: Learning from unexpected rare crises. ***Organization Science,*** 20: 876–893.

Rivera, J., & de Leon, P. 2005. Chief executive officers and voluntary environmental performance: Costa Rica's certification for sustainable tourism. ***Policy Sciences,*** 38: 417–437.

Russo, M. V., & Fouts, P. A. 1997. A resource-based perspective on corporate environmental performance and profitability. ***Academy of Management Journal,*** 40: 534–559.

Salter, M. S. 2013. Short-Termism at its Worst: How Short-Termism Invites Corruption... And What to Do About It? Working paper Nº 5, Harvard University. Last accessed March 23, 2014. http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2247545.

Salter, M. S. 2013. Short-termism at its worst: How short-termism invites corruption... And what to do about it? ***Edmond J. Safra Research Lab Working Papers,*** 5: 1–70.

Sampson, R. C. 2005. Experience effects and collaborative returns in R&D alliances. ***Strategic Management Journal,*** 26: 1009–1031.

Schwartz, H. S. 1987. On the psychodynamics of organizational disaster: The case of the space shuttle Challenger. ***Columbia Journal of World Business,*** 22: 59-68.

Schwenk, C. H. 1996. Information, cognitive biases, and commitment to a course of action. ***Academy of Management Review,*** 11: 298–310.

Senge, P. M., & Carstedt, G. 2001. Innovating our way to the next industrial evolution. ***Sloan Management Review,*** 42: 24–38.

Sethi, S. P. 1979. A conceptual framework for environmental analysis of social issues and evaluation of business response patterns. ***Academy of Management Review,*** 4: 63–74.

Sethi, S. P. 1994. Imperfect markets: Business ethics as an easy virtue. ***Journal of Business Ethics,*** 30: 803–815.

Sharfman, M. 1996. The construct validity of the Kinder, Lydenberg & Domini Social performance ratings data. ***Journal of Business Ethics,*** 15: 287–296.

Sharfman, M., & Dean, J. 1991. Conceptualizing and measuring the organizational environment: A multi-dimensional approach. ***Journal of Management,*** 17: 681–700.

Sharma, A., & Kesner, I. F. 1996. Diversifying entry: Some ex ante explanations for postentry survival and growth. ***Academy of Management Journal,*** 39: 635–677.

Sharma, S. 2000. Managerial interpretations and organizational context as predictors of corporate choice of environmental strategy. ***Academy of Management Journal,*** 43: 681–697.

Sharma, S., & Henriques, I. 2005. Stakeholder influences on sustainability practices in the Canadian forest products industry. ***Strategic Management Journal,*** 26: 159–180.

Sharma, S., & Vredenburg, H. 1998. Proactive corporate environmental strategy and the development of competitively valuable organizational capabilities. ***Strategic Management Journal,*** 19: 729–753.

Sharma, S., Pablo, A. L., & Vredenburg, H. 1999. Corporate environmental responsiveness strategies: The importance of issue interpretation and organizational context. ***Journal of Applied Behavioral Science,*** 35: 87–108.

Sheaffer, Z., & Mano-Negrin, R. 2003. Executives' orientations as indicators of crisis management policies and practices. ***Journal of Management Studies,*** 40: 573–606.

Shrivastava, P. 1993. Crisis theory/practice: Towards a sustainable future. ***Organization & Environment,*** 7: 23–42.

Shrivastava, P. 1994. Castrated environments: Greening organizational studies. ***Organizational Studies,*** 15: 705–726.

Shrivastava, P. 1995. Environmental technologies and competitive advantage. ***Strategic Management Journal,*** 16: 183–200.

Simerly, R. L., & Li, M. 2000. Environmental dynamism, capital structure and performance: A theoretical integration and an empirical test. ***Strategic Management Journal,*** 21: 31–50.

Simon, H. A. 1976. ***Administrative Behavior.*** New York: Macmillan.

Slawinski, N., & Bansal, P. 2012. A matter of time: Temporal perspectives in organizational responses to climate change. ***Organization Studies,*** 33: 1537–1563.

Smart, C., & Vertinsky, I. 1977. Designs for crisis decision. ***Administrative Science Quarterly,*** 22: 640–657.

Staw, B. M., & Szwajkowski, E. 1975. The scarcity-munificence component of organizational environment and the commission of illegal acts. ***Administrative Science Quarterly,*** 20: 345–354.

Strike, V. M., & Bansal, P. 2006. Being good while being bad: Social responsibility and the international diversification of U.S. firms. ***Journal of International Business Studies,*** 37: 850–862.

Szwajkowski, E. 1985. Organizational Illegality: Theoretical integration and illustrative application. ***Academy of Management Review,*** 10: 358–367.

The Coca-Cola Company. 2007. Annual Report.

The Coca-Cola Company. 2009. Annual Report.

Tong, T. W., & Li, Y. 2011. Real options and investment mode: Evidence from corporate venture capital and acquisition. ***Organization Science,*** 22: 659–674.

Tucker, A. L., & Edmondson, A. C. 2003. Why hospitals don't learn from failures: organizational and psychological dynamics that inhibit system change. ***California Management Review,*** 45: 55–72.

Turner, B. A. 1976. The Organizational and interorganizational development of disasters. ***Administrative Science Quarterly,*** 21: 378–397.

Tversky, A., & Kahneman, D. 1974. Judgment under uncertainty: Heuristics and biases. ***Science,*** 185: 1124–1131.

Vaughan, D. 1990. Autonomy, interdependence and social control: NASA and the space shuttle Challenger. ***Administrative Science Quarterly,*** 35: 225–257.

Vermeulen, F., & Barkema, H. 2002. Pace, rhythm, and scope: process dependence in building a profitable multinational corporation. ***Strategic Management Journal,*** 23: 637–653.

Vidal-Salazar, M. D., Cordón-Pozo, E., & Ferrón-Vilchez, V. 2012. Human resource management and developing proactive environmental strategies: The influence of environmental training and organizational learning. ***Human Resource Management,*** 51: 905–934.

Vinton, D. 1992. A new look at time, speed, and the manager. ***Academy of Management Executive,*** 6: 7–16.

Volberda, H. W., Van den Bosch, F. A. J., Flier, B., & Gedajlovic, E. R. 2001. Following the herd or not? Patterns of renewal in the Netherlands and the UK. ***Long Range Planning,*** 34: 209–229.

Waddock, S. A., & Graves, S. B. 1997. The corporate social performance financial performance link. ***Strategic Management Journal,*** 18: 303–319.

Waldman, D. A., Siegel, D. S., & Javidan, M. 2006. Components of CEO transformational leadership and corporate social responsibility. ***Journal of Management Studies,*** 43: 1703–1725.

Walls, J. L., Berrone, P., & Phan, P. H. 2012. Corporate governance and environmental performance: Is there really a link? ***Strategic Management Journal,*** 33: 885–913.

Walsh, J. P. 1995. Managerial and organizational cognition: notes from a trip down memory lane. ***Organization Science,*** 6: 280–321.

Wang, H., & Li, J. 2008. Untangling the effects of overexploration and overexploitation on organizational performance: The moderating role of environmental dynamism. ***Journal of Management,*** 34: 925–951.

Weick, K. E. 1988. Enacted sensemaking in crisis situations. ***Journal of Management Studies,*** 25: 305–317.

Weick, K. E. 1989. Mental models of high reliability systems. ***Industrial Crisis Quarterly,*** 3: 127–142.

Weitzel, W., & Jonsson, E. 1989. Decline in organizations: A literature integration and extension. ***Administrative Science Quarterly,*** 34: 91–109.

Wicks, D. 2001. Institutionalized mindsets of invulnerability: Differentiated institutional fields and the antecedents of organizational crisis. ***Organization Studies,*** 22: 659–692.

Wooldridge, J. M. 2003. ***Introductory Econometrics: A Modern Approach*** (2nd ed.). Mason, Ohio: South-Western.

World Business Council for Sustainable Development (WBCSD). 2011. People Matter Lead. Last accessed March 23, 2014. *oldwww.wbcsd.org/Plugins/DocSearch/details.asp?DocTypeId=25&ObjectId=40060&URLBack=%2Ftemplates%2FTemplateWBCSD2%2Flayout.asp%3Ftype%3Dp%26MenuId%3DODU%26doOpen%3D1%26ClickMenu%3DRightMen.*

World Commission on Environment and Development (WCED). 1987. ***Our Common Future.*** Oxford: Oxford University Press.

Younker, T. 2009. Indra Nooyi: New Era of Business. Last accessed March 23, 2014. *http://asiasociety.org/business/economic-trends/indra-nooyi-new-era-business.*