Addressing COVID through PCD: policy coherence for vulnerability in development and its relationship to the coronavirus pandemic

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Abstract

Purpose – The purpose of this article is to understand how coronavirus impacts relate to existing vulnerabilities in different world regions.

Design/methodology/approach – The article utilizes quantitative analysis to examine regional variations in coronavirus risk assessment. It then qualitatively employs a policy coherence for development (PCD) approach to analyze how public policies contribute to or mitigate vulnerability, defined as the product of exposure to external shocks, institutional coping capabilities and risk associated with social divisions in societies.

Findings – The research presented below shows that significant regional variance exists in terms of coronavirus risk, based on statistical analysis of the INFORM COVID-19 Risk Report prepared by the European Commission. The PCD analysis highlights important relationships between public policy strategies and the construction of both underlying vulnerabilities and coronavirus impacts.

Practical implications – The PCD approach presented here focuses on the reconciliation of trade-offs. It shows how policy interactions affect vulnerabilities and suggests that coherent policy strategies aimed at reducing vulnerabilities are necessary in order to adequately respond to the coronavirus pandemic.

Originality/value – This analysis frames vulnerability as a socially constructed condition and through implementation of a PCD approach, it indicates how policy strategies contribute to or mitigate vulnerabilities. In doing so, it intends to contribute conceptually to the literature on vulnerability by showing how policy incoherences contribute to the construction of this condition. Empirically, the originality of this article is its statistical analysis of regional variance of coronavirus risk and the qualitative analysis of policy strategies in representative cases and how they have affected vulnerabilities and coronavirus impacts.

Keywords Coronavirus, Policy coherence for development, Regional inequalities, Risk, Vulnerability

Paper type Research paper

Introduction

The coronavirus pandemic has laid bare all of our socioeconomic vulnerabilities. Reduced commitments to welfare have led to overwhelmed health systems. Expanding inequalities have exposed many to economic disaster as quarantines have paralyzed economies. Insufficient public services have made washing hands, the most effective way to prevent illness, a challenge in many places.

The coronavirus crisis and state responses to it have already been characterized by paradoxes. For example, in the United States, 20.5 million people registered for unemployment insurance by May 2020 (Kochhar, 2020) and more than half of low-income families in the United States cannot pay their bills since the pandemic began. Only 23% report the existence of emergency funds. At the same time, the 34 richest billionaires in the US have recovered US$565bn in wealth since the start of the crisis (Egan, 2020).

Throughout the world, politicians have trumpeted efforts aimed to promote the so-called "return to normal." This claim seems misguided as our normal state seems to be the inequality that coronavirus disease 2019 (COVID-19) (COVID-19 and coronavirus will be used as synonyms throughout the article) has further exposed and exacerbated. According to the 2018 World Inequality Report, "In recent decades, income inequality has increased in nearly all countries, but at different speeds, suggesting that institutions and policies matter in shaping inequality." (Alvaredo *et al.*, 2017, p. 5) This article examines these relationships. Employing a policy coherence for development (PCD) approach, this research asks: "How do public policies affect vulnerability and how do state Covid-19 strategies contribute to or mitigate the pandemic's impact on societies?" While the coronavirus could not have been foreseen as an external shock to national systems of well-being, all countries should have been somewhat prepared for the arrival of some sort of shock. Renown global statesman Harlan Cleveland noted in the 1960s that crisis is the normal state of international systems. (cited in Koff and Maganda, 2020, p.1).

This article is divided into five sections. Following this introduction, part two presents a review of the literatures on the social construction of vulnerability. It positions the article within this scholarship and lays the foundation for the analysis of the socioeconomic impacts of coronavirus. Part three presents PCD as the conceptual approach for analysis. This is followed by empirical analysis in part four which presents quantitative examination of the variation of coronavirus impact by world region and analysis of the relationships between policy and national vulnerabilities in selected cases. Finally, part five presents the article's conclusions. The analysis presented here contends that states socially construct vulnerabilities through public policy approaches that either contribute to or mitigate inequalities.

Literature review: the social construction of vulnerability

The first analytical foundation of this research is the premise that vulnerability is socially constructed. Social risk construction theory emerged from the field of disaster sociology in the 1960s (see García Acosta, 2011). This approach was developed in many works cataloged as "behavioral" (Douglas and Wildavsky, 1983) because they focused on risk perceptions. More recent works focused on the social production of inequality as the basis of risk construction. García Acosta (2018) analyzes how social cohesion models affect the establishment of vulnerability within societies. This approach has been implemented empirically in different contexts by scholars such as Aguilar Léon (2018) who examined how social divisions affect risk construction related to resource extraction in Mexico.

This approach to risk identifies the structural bases of vulnerabilities. Gustavo Wilches-Chaux's approach to disaster research (1993) proposes a classification of 10 types of vulnerability. Some typologies that are relevant for this article include: economic

vulnerability which is linked to poverty and the scarcity of economic resources including economic dependency at the community level; social vulnerability which refers to the low degree of organization and internal cohesion of communities at risk; political vulnerability which refers to the centralization of decision-making as a factor that weakens the levels of local autonomy to decide the most appropriate action strategies; technical vulnerability which is technological lag and inadequate building construction techniques and basic infrastructure used in risk areas and ecological vulnerability referring to development models that dominate and destroy environmental reserves, leading to vulnerable ecosystems incapable of self-adjustment.

The vulnerabilities presented by Wilches-Chaux provide an interesting departure point from which to construct analysis of the interaction between public policies and vulnerability in local communities. Policies affect the distribution or concentration of resources in each of these typologies that affect citizen access and resulting inequalities. On March 7, 2020, *The Lancet* published an editorial entitled, "Redefining vulnerability in the era of COVID-19" (The Lancet, 2020). This contribution highlighted the fact that vulnerability responds to public policies, depending on whether they address or reinforce it. This point is the foundation of an editorial response also published in *The Lancet* on April 27, 2020 in which the authors contend that "more ground-work is needed to shift the landscape from an individual pathologizing of capacity, autonomy, and agency to the identification of divisions that define vulnerability within cultures, communities, and particular social groups." (Ahmad *et al.*, 2020, p. 2). This article engages this debate by analyzing vulnerability and appropriate responses through a PCD approach. PCD is defined as the coherence between nondevelopment policies and development objectives. By examining the relationship between sectoral policies in the case countries and the exacerbation or mitigation of vulnerabilities, this article examines the relationship between policies and vulnerability in development. It analyzes the hypothesis that public policies have augmented inequalities and exposure on which socioeconomic vulnerability is established. This has created underlying conditions that have weakened national responses to coronavirus. This is explained in the following section

Conceptual approach and research methodology

PCD was first proposed by the European Union (EU) and the Organization for Economic Cooperation and Development (OECD) in the 1990s. Since then, it has been promoted by international organizations and their member states as a means to promote sustainable development. PCD is included in Target 17.14 of the 2030 Agenda, focusing on sustainability partnerships for achievement of the Sustainable Development Goals (SDGs) (Graham and Graham, 2019; Martens, 2015). In global discussions, the concept has been reproposed as policy coherence for sustainable development (PCSD) in order to highlight the importance of "whole of government approaches" to sustainability (Larsson, 2018).

While international organizations have promoted PCD/PCSD, academic perspectives have been critical of the concept. Grabel, for example, (2007) indicated that PCD has been abused by international organizations. Thede (2013) contended that PCD reinforced North–South divisions in order to maintain stability in global affairs. The recognition of "Northern" bias in PCD approaches is present is research by Koff *et al.* (2020), Siitonen (2016) and Mbanda and Fourie (2019) as well.

Recent studies have raised important questions on PCD. Carbone (2008) correctly contended that PCD can be pursued as both a means and an end and he illustrates how the EU and OECD have promoted PCD as the latter. Carbone and Keijzer (2016) argue that the EU has pursued the development of institutional reform over policy effectiveness. Pilke and Stocchetti (2016) contend that EU policy tools like PCD have reduced impact because the EU

defines inequality narrowly in its development cooperation strategies, thus limiting scope of action.

Within this debate, the notion of "normative policy coherence for development" has emerged. Because policy approaches and academic attention focused mostly on "coherence" (Siitonen, 2016) limited attention was paid to the normative objectives of PCD (Häbel, 2020). Organizations have attempted to implement PCD without necessarily questioning the content of "sustainable development" as a policy objective or its impacts on communities. Through a study of EU development aid in the water sector, Koff and Maganda (2016) examine the lack of operational support for the human right to water and sanitation among development cooperation donors. These programs actually undermine this human right by refusing to recognize or operationalize it. This study showed how donor program efficiency was prioritized over normative change and the pursuit of global equity. Similarly, Koff (2017) argues that the United States' and EU's systemic securitization of development aid undermines PCD implementation in reference to migrants' rights. He questions the lack of normative commitment by the US and the EU and its member states to human rights in development programs related to migration. Similarly, Häbel (2020) contends that normative development goals, such as human rights, gender equality, democratization, etc. are often undermined by commercial interests and trade actors.

Despite these critical narratives, recent research has emerged that reproposes PCD as a means for norm-driven policy implementation because it focuses on trade-offs as mentioned above. Zeigermann (2020) contends that PCD promotes human security because it fixes on policy interlinkages and unintended consequences. Collste et al. (2017) propose PCD as the basis for SDG integrative modeling techniques. Building on these studies, this research examines the normative coherence of national sectoral policies in relation to vulnerability. This is explained in the empirical analysis below.

Research methods

The study includes a mixed methods research approach that combines the macro perspective of quantitative research, with the micro perspective of qualitative public policy analysis. Therefore, in this study we have followed a sequential explanatory strategy divided into two structurally different but related phases (Creswell, 2014). The first analyzes a series of quantitative data from the INFORM COVID-19 Risk Report prepared by the European Commission (Poljansek et al., 2020a, b). It is an experimental adaptation of the INFORM Epidemic Risk Index that aims to identify countries at risk of suffering COVID-19 impacts from health and humanitarian points of view through the analysis of a set of structural factors. In the second phase, five cases have been selected that will be the object of a more in-depth analysis in order to map the coherence of public policies.

These case countries are South Korea, Spain, Australia, Mexico and South Africa in order to ensure one representative case from each world region identified in part one of the analysis. These countries were chosen because of structural characteristics that facilitate hypothesis testing. In terms of regional integration, Spain and South Africa are embedded in regional organizations which affect their field of action in terms of COVID-19 responses. Australia and Mexico belong to regional communities but they have more freedom of action. South Korea is not a member of an institutionalized regional organization but it participates in the Association of Southeast Asian Nations (ASEAN) Plus Three configuration and the Asia–Pacific Economic Cooperation intergovernmental forum. In terms of financial transactions, South Korea and Australia are aid donors whereas all other states are receiving COVID-19 aid.

Economically, South Korea, Spain, Australia and Mexico are ranked (in different orders depending on the index) 12, 13, 14 and 15 in overall gross domestic product (GDP) by the

International Monetary Fund, the World Bank and the United Nations. South Africa is ranked much lower, between 33 and 35, but it has been included in the study because it is the highest-ranking African state. Because GDP levels are similar for four cases, we can examine the impact of state wealth on COVID-19 responses by hypothesizing a grouping. The countries are very different in terms of welfare ideologies which are evident in their welfare spending. Spain spends the most on welfare at 23.7% of its GDP followed by Australia (17.8% of GDP), South Korea (11.1% of its GDP), Mexico (7.5% of its GDP) and South Africa (4% of GDP) (https://www.oecd.org/social/expenditure.htm). Should welfare commitments prove to determine coronavirus responses, then Spain and Australia should promote greater equity in their coping strategies than the other three states.

Data have been collected through systemic reviews of social and economic policies in each case country and examination of key socioeconomic indicators related to resilience and vulnerability. Policy information was collected through the websites of the case countries' governments and through secondary sources. The policy analysis was carried out according to a normative PCD methodology developed by Koff and Maganda (2019) and Koff *et al.* (2020) which is explained in detail in Section 4. This methodology establishes scales that indicate the impacts of policies on normative objectives through the measurement of trade-offs and synergies (see Nilsson *et al.*, 2018). Socioeconomic data related to inequality and vulnerability is the selected cases was collected through the OECD Website and the websites of the case country governments.

Findings
This article engages this special issue on the relationship between coronavirus and inequalities by comparatively examining coronavirus in different world regions. Quantitative analysis indicates that the pandemic has affected different world regions to different extents. Part one of this analysis examines these variances through quantitative analysis of world regions. Part two presents qualitative analysis of comparative public policies in representative cases which aims to explain these variances through PCD analysis.

Quantitative analysis: COVID-19 risk by world region
As stated above, our quantitative research is based on the European Commission's COVID-19 Risk Index. The database contains $n = 191$ cases corresponding to the countries included in each of the United Nations (UN) geographic regions. The scores obtained by country for each of the variables in the report were treated as factors and analyzed through statistical software in order to examine significant differences in interregional risk levels. A first analysis of variance (ANOVA) was conducted to identify whether there are contrasts in the equality of means with respect to the level of risk in each geographic region (Agresti, 2017). The hypothesis that was tested asked if the population means are equal. If the population means are equal, then groups do not differ in the dependent variable. The categorical variable that defines the groups that have been compared in this analysis is "UN Geographical Regions." This variable has been constructed in order to classify each of the 191 countries in each of the continents to which they belong: Europe, Asia, America, Oceania and Africa. The variable is categorical and consists of five categories of nominal response. The quantitative variable (interval or ratio) in which the regions have been compared is "Inform COVID-19 Risk" which has been included in the study in order to estimate the difference in the risk index toward coronavirus in each of the regions, as well as to compare the strength of the epidemic risk index for each of the regions. This variable is an index composed of different scores in three dimensions: (1) risk and exposure (includes the person-to-person factor), (2) vulnerability (includes retained movement and behavior components and demographic data along with specific COVID-19 comorbidities) and (3)

lack of coping capacity (includes data on the capacity of the specific health system to deal with COVID-19) (see Table A1 in the appendix).

In a second phase of the analysis, a multinomial logistic regression model was estimated in order to identify the degree or strength of the risk index in each of the geographic regions. Logistic regression is a widely used statistical tool that is useful to identify the presence or absence of risk factors, as well as their strength (Agresti, 2013). There are two main utilities offered by multinomial logit models. On one hand, they propose the relationship between the explanatory variable, which in this case is the risk index of the INFORM COVID-19 Risk Report and the result or response variable, which in this case is "UN Geographical Regions."

On the other hand, logit models offer predictive information through an iterative probability estimation process. In the context of this study, the estimated logit model has made it possible to identify the influence and strength of the risk index in each of the geographical regions, allowing for the establishment of different risk profiles for each of the regions that have been studied. This has been made possible through inference on the odds ratios that the model produced. The odds ratios are the exponentials of the estimated parameters for the risk index (explanatory variable) and they explain how much the risk is multiplied with respect to each of the regions (response variable), having set one of them as a reference category.

Differences in means of the INFORM risk index according to UN geographic regions
As stated above, to assess whether there were differences between the levels of risk toward COVID-19 in each of the geographic regions, an ANOVA test was performed. The five geographic regions were taken as fixed factors and the composite score of the INFORM risk index was taken as the independent variable. The Fisher–Snedecor F statistic was used to test the hypothesis of equality of means and to check if there were statistically significant differences in the dependent variable. The ANOVA analysis showed statistically significant differences between each of the geographic regions. Table 1 presents the mean scores for the tested variables, the standard deviations, the test of contrast of the equality hypothesis and the corresponding p-value.

UN regions	N	M	SD	F	p-value
Europe	40	3.100	0.6775		
Asia	48	4.067	0.9681		
Americas	35	3.891	0.7713	49.204	0.000*
Oceania	14	4.479	1.2674		
Africa	54	5.585	0.9119		

Note(s): M = Mean; SD = Standard Deviation; *$p < 0.001$
Source(s): Made by the authors

Table 1.
Differences in means of the INFORM risk index according to UN Geographic Regions

A Turkey-method post hoc analysis showed the differences in the composite score of the INFORM risk index. Table 2 presents multiple comparisons of the risk index according to UN Geographical regions. It shows that statistically significant differences are observed between Europe and the other world regions, especially with respect to Africa and Oceania. Asia also reflects statistically significant differences, but in this case, only for the cases of Europe and Africa. America also reflects significant differences with Europe and Africa. In the case of Oceania, differences are observed in relation to Africa and Europe. For Africa, the multiple comparison analysis revealed significant differences with all regions, especially Europe.

i-Regions	j-Regions	Mean difference	p-value
Europe	Asia	−0.9667	0.000**
	Americas	−0.7914	0.002*
	Oceania	−1.3786	0.000**
	Africa	−2.4852	0.000**
Asia	Europe	0.9667	0.000**
	Americas	0.1752	0.902
	Oceania	−0.4119	0.548
	Africa	−1.5185	0.000**
Americas	Europe	0.7914	0.002*
	Asia	−0.1752	0.902
	Oceania	−0.5871	0.230
	Africa	−1.6938	0.000**
Oceania	Europe	1.3786	0.000**
	Asia	0.4119	0.548
	Americas	0.5871	0.230
	Africa	−1.1066	0.000**
Africa	Europa	2.4852	0.000**
	Asia	1.5185	0.000**
	Americas	1.6938	0.000**
	Oceania	1.1066	0.000**

Note(s): **p < 0.001; *p < 0.005
Source(s): Made by the authors

Table 2.
Multiple comparisons
of the INFORM risk
index according to UN
geographical regions

Multinomial comparison of the INFORM risk index according to the Geographic regions of the UN

In order to calculate the strength of the risk index for each of the regions, we estimated a multinomial logit model that is presented in Table 3. To check the adequacy of the model to the data, we studied goodness of fit, once the validity of the Wilks test of likelihood ratio and its corresponding p-value had been verified. The Cox and Snell pseudo R^2 tests were studied, which on the one hand indicates that the model explains 43% of the variance and the Nagelkerke R^2 test on the other hand explains 52%. Once these checks were made, the model was interpreted through the information reported by the odds ratio.

The results of the logit model obtained relative to the forecast of the degree of risk contrast between geographic regions in the estimation of their beta (B) and exponential parameters (odds ratio) with their corresponding 95% confidence intervals, p-values and Wald test are listed in Table 3. Based on the results obtained by the Wald test, the table shows that the COVID-10 Risk variable is significant for each category of response variable. Analyzing the odds ratio reported by the model, we observe that in the Asian region the estimated risk is 4.2 times higher than in Europe. Regarding the American continent, the risk is somewhat lower, specifically this region multiplies by 3.3 the reason for being affected by a shock with respect to the European continent. As for Oceania, the risk is much higher since the risk of shock by COVID-19 is almost seven times higher than in Europe. Finally, the African continent is the one that yields the most negative data, since it multiplies by 22 the reason for being affected by a possible shock caused by COVID-19 against the European continent, which is the one with the lowest risk of each of the geographic regions.

Figure 1 highlights the discriminant capacity of the model. From the diagonal toward the sensitivity axis one finds the regions that face lower risk, whereas lines toward the specificity axis represent higher risk regions. The model has a very considerable discrimination capacity, especially between Europe and Africa, the two regions with the highest degree of differentiation in terms of the degree of risk. There is also a considerable differentiation

Table 3.
Multinomial logistic regression model for the estimation of interregional risk

Regions		B	SD	Wald	df	p-value	OR	95% confidence interval odds ratio Lower	Upper
Asia	Intersection	−4.934	1.150	18.409	1	0.000***			
	COVID-19 Risk	1.439	0.322	19.971	1	0.000***	4.217	2.243	7.926
Americas	Intersection	−4.361	1.165	14.004	1	0.000***			
	COVID-19 Risk	1.216	0.328	13.765	1	0.000***	3.373	1.774	6.410
Oceania	Intersection	−8.184	1.666	24.127	1	0.000***			
	COVID-19 Risk	1.912	0.416	21.163	1	0.000***	6.766	2.996	15.280
Africa	Intersection	−12.839	1.695	57.398	1	0.000***			
	COVID-19 Risk	3.103	0.403	59.304	1	0.000***	22.272	10.110	49.065

Goodness of fit	VR							
	Intersection			$G^2 =$	378.032	$\chi^2 =$	118.424	0.000***
	COVID-19 Risk			$G^2 =$	391.515	$\chi^2 =$	131.907	0.000***
			Pseudo R^2			$R^2_{CyS} =$	0.499	
						$R^2_N =$	0.523	

Area under the ROC curve	
Europa	0.862
Asia	0.498
Americas	0.618
Oceania	0.243
Africa	0.138

Note(s): ***$p < 0.001$. The reference category is Europe
Source(s): Made by the authors
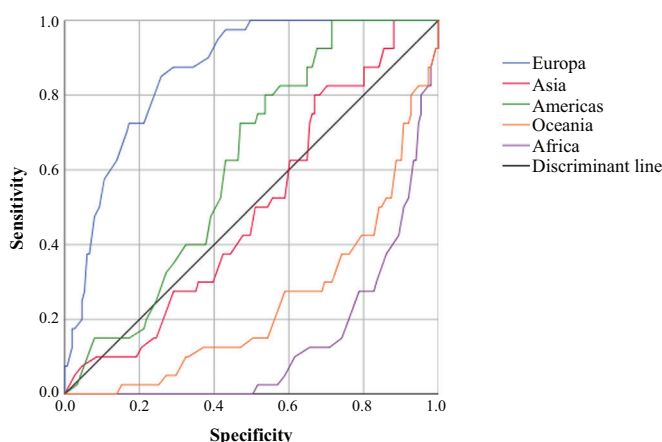
Source(s): Made by the authors

between Europe and Oceania. However, in the case of America and Asia, we observe that these continents are in an intermediate point and very close to each other, which implies that the risk levels are quite similar in both. There is a differentiation between the European region and Asia and America. All these variations are examined below through a PCD approach.

Qualitative analysis: explaining vulnerability through a PCD approach
PCD is an important tool in development cooperation frameworks because it highlights the significance of policy interactions. Instead of conceptualizing the relationships between policies, outputs and outcomes in a linear manner, it focuses on policy networks and how they interact (Häbel, 2020; Siitonen, 2017). The analysis presented here employs this approach. More than inequality, the focus of the article is vulnerability which is defined as the combination of internal risk and exposure to external shocks. As risk and exposure are socially constructed (see Gerber, 2020; Nadalutti, 2020), the study examines how policies contribute to the expansion or mitigation of risk and exposure within the case studies affected by coronavirus. Table A2 in the appendix presents the defining characteristics of different sectoral policies in the case studies. The first five sectors summarized in the table (trade, business, finance, tourism and agriculture) all relate to the exposure of national economies to external shocks. The second two policy arenas (infrastructure and taxation) highlight state capacities to institutionally provide services to citizens, thus relating to risk. The final six policy sectors (labor, migration, natural resource management, unemployment insurance, health services and antipoverty programs) all address domestic social risk directly.

This risk is often perpetuated through policies that pursue economic growth at the expense of protection. Medical exposure goes beyond the scope of this article. The research presented here is restricted to socioeconomic exposure. When trade, business, finance, tourism and agriculture are oriented toward growth and international exchange, then citizens are exposed to external shocks. Similarly, infrastructure and tax policies aimed at supporting trade, business, etc. at the expense of sustainability affect coping capacities. Finally, the policy sectors directly related to risk, which are labor, migration, unemployment, health and poverty, aim to mitigate social divisions that weaken societies.

Table 4 operationalizes these arguments through presentation of scales based on previous work measuring normative PCD. The values presented here examine whether the normative

Interaction	Name	Explanation	Example
+3	Indivisible	Intentionally and directly mutually reinforcing norms	Intentional and direct normative commitments to reducing vulnerabilities
+2	Reinforcing	Intentionally and indirectly mutually reinforcing norms	Unintentional and direct normative commitments to reducing vulnerabilities
+1	Enabling	Creates conditions that further sustainable development	Indirect normative discourse in favor of reducing vulnerabilities
0	Consistent	No significant positive or negative interactions	Absence of normative elements in policy debates
−1	Constraining	General normative resistance to sustainable development	Indirect normative discourse for growth-based development
−2	Counteracting	Unintentionally and/or indirectly clashing norms	Unintentional and direct normative commitments that contribute to vulnerabilities through pro-growth strategies
−3	Canceling	Intentionally and directly clashing norms	Intentional and normative commitments that contribute to vulnerabilities through pro-growth strategies

Source(s): Koff, H., Challenger, A., Portillo, I. (2020) Guidelines for Operationalizing Policy Coherence for Development (PCD) as a Methodology for the Design and Implementation of Sustainable Development Strategies. *Sustainability*, 12, 4055

Table 4.
Scale for measurement of coherence for vulnerability in development

bases of policies contribute to vulnerabilities or mitigate them within the case countries. The methodology was developed by Koff *et al.* (2020) based on the work proposed by Nilsson *et al.* (2018) which maps the interactions between the SDGs. In order to adapt this scale to norms, policies are analyzed in terms of intentional/unintentional and direct/indirect impacts. In cases where policies intentionally and directly mitigate vulnerabilities +3 is assigned. When policies intentionally and directly contribute to vulnerabilities in pursuit of economic growth or other objectives then −3 is assigned. The values in-between represent mixed relationships as explained in the table. Table 5 then implements empirical analysis through the application of the scale described in Table 4.

Globally, the analysis presented in Table 5 indicates clear patterns. Spain, an EU member state with clear commitments to socioeconomic and ecological sustainability presents the most coherent policy framework in response to vulnerability (see Moldes-Anaya *et al.*, 2019), even though the country's and the EU's focus on becoming a global economic power inherently increases exposure through amplified international exchanges. South Africa presents a positive but reduced overall score due to positive exposure scores but normative commitments to addressing domestic risk in many arenas are undermined by a lack of institutional capacities in others, such as financial regulation, taxation, antipoverty programs and management of natural resources. Mexico, unsurprisingly, is the country with the lowest vulnerability score as economic integration strategies in North America and Asia–Pacific regions contribute to exposure while limited institutional capacities undermine infrastructure and taxation effectiveness and risk is augmented by the lack of necessary attention to poverty and unemployment. South Korea and Australia represent mixed cases.

The internal patterns in the analysis are also interesting. South Korea for example demonstrates high exposure scores mitigated by attention to social risk, especially in the health sector. One would expect the country to respond well to the coronavirus pandemic in terms of health but show less preparedness to address any unequal impacts on its population

Country	International trade policy	Business policy	Finance	Tourism	Agriculture policy	Infrastructure	Labor policy	Taxation policy	Migration policy	Natural resources	Unemployment insurance	Health policy	Antipoverty	Overall
South Korea	−3	−3	+2	−3	+2	+1	−2	−1	+1	−3	−2	+3	−2	−10
Australia	−1	+2	+2	−2	+1	−3	+1	+1	−3	+3	−3	−2	−1	−5
Spain	−1	+1	−2	−1	−2	+3	+3	+2	+2	+3	+2	+3	+3	+16
Mexico	−3	−2	−3	−2	−3	−2	+1	−1	−1	+1	−3	+2	−1	−17
South Africa	+1	+2	−2	+1	+2	+2	+2	−3	−3	−2	+1	+2	−2	+1
Overall	−7	0	−3	−7	0	+1	+5	−2	−4	+2	−5	+8	−3	−15

Source(s): Table established by authors

Table 5.
Comparative analysis of normative policy coherence for development by country and policy sector

given its universal approach to well-being. Conversely, Australia is less exposed economically although its response to risk remains mixed. South Africa shows lower exposure and risk scores but its policies contribute to vulnerabilities through limited institutional capacities. Finally, Mexico scores negatively across the board, indicating general vulnerability throughout the country.

This article questions whether these policies impact vulnerability in the case countries. Table 6 indicates that there is some relationship between public policy frameworks and vulnerability. The first set of indicators focus on risk defined as the social divisions that exist within domestic societies. The first two indicators, income inequality and poverty rate are highest in Mexico, South Africa and South Korea. These three countries are those that have demonstrated the least significant commitment to social integration. South Africa and Mexico's reduced institutional capabilities also hurt the abilities of governments in these countries to address inequalities and poverty. Interestingly, gender wage gaps are highest in Spain and South Korea so policies do not seem to affect gender inequalities as significantly.

The second group of indicators focuses on government response capacities. According to the policy analysis presented above, the biggest challenge that affects South Africa and Mexico is the inability to raise funding through effective tax policies and invest in infrastructure. These countries in fact have the lowest government revenues and they are

Variable	Unit	Spain	South Korea	South Africa	Mexico	Australia
Income inequality	GINI coefficient	0.33	0.35	0.62	0.46	0.33
Poverty rate	% population	0.148	0.174	0.266	0.166	0.124
Gender wage gaps	%	35.7	32.5	16	18.8	11.7
General government revenues	% of GDP	39.09	31.6	28.4	22.65	36.03
General government expenditures	% of GDP	41.72	17.3	21.296	11.6	38.67
Government/compulsory expenditure on health	USD per capita	2,559	2,057	458	583	3.495,2
Public social expenditure	% of GDP	23.7	11.5	n.a	7.5	17.8
Total tax revenue	% of GDP	34.40	15.6	27.5	16.13	28.53
Imports of goods and services	% of GDP	32.05	33.5	30.6	41.16	21.56
Exports of goods and services	% of GDP	34.87	41.1	30.1	39.29	24.13
Inflows of foreign direct investment	% of GDP	0.40	0.64	1.32	2.68	2.81
Outflows of foreign direct investment	% of GDP	1.27	2.61	0.89	0.81	0.49
Incidence of part-time employment	%	13.218	14	9.3	17.650	25.539
Self-employment rate: total employment	%	15.678	24.6	15.55	31.946	9.666
Self-employment rate: male employment	%	19.000	26.6	17.9	31.430	11.327
Self-employment rate: female employment	%	11.726	22.1	12.5	32.750	7.800
Unemployment rate: total labor force	%	15.600	4.8	28.18	5.500	7.449
Informal economy	% employment	18%	25%	60.4	66.4	Approx. 6%*

Table 6.
Selected vulnerability indicators in the six case studies

Note(s): *This statistic is approximated from a public opinion survey conducted by OECD as no official data exists. It is in line with low % of GDP in the informal sector
Source(s): Table established by authors from national studies and OECD data

among the states with the lowest government expenditures. Interestingly, South Korea also demonstrates low government expenditures which is related more to welfare ideology as its social programs are limited. This is evident in its low levels of social program expenditure. Also, it is important to recognize Spain's elevated levels of government revenue, spending and social spending which correlates to the policy commitment to social welfare mentioned above. The outlier in this analysis is Australia which is characterized by higher rates of government revenues and expenditures despite policies that focus more on economic growth than social well-being.

Finally, the last group of indicators seem to reinforce the notion that policies affect vulnerability in the selected cases. Mexico and Korea represent the countries with the most open economies. Mexico is the country with the highest rates of imports and exports of goods and services and flows of foreign direct investment, indicating that it is the economy that is most exposed to external shocks. This is followed by Korea and Spain, both of which are integrated in the global economy. South Africa and Australia both show limited levels of exposure but Australia does receive elevated levels of foreign direct investment.

These trends are important because they seem to indicate that Mexico is the country where the population is most vulnerable in terms of economic exposure, lack of institutional capacity and limited state commitments to addressing social inequalities. In fact, the indicators on self-employment, part-time employment and informal economy are all elevated in Mexico, indicating heightened levels of vulnerability, despite a low official unemployment rate. By contrast, Australia is characterized by high part-time employment but low levels of self-employment and informal economy. Most activities in these sectors are among young people or ethnic minorities. In general, the state regulates the country's economy and provides for groups in at-risk situations, thus lowering the general level of vulnerability. Spain and South Korea represent mixed cases with medium indicators in these categories. South Africa's self-employment levels are low and its unemployment and informal economy scores are high, indicating structural economic problems which reflect the lack of institutional capacities cited in the analysis above.

Based on these trends, the expectation would be that Mexico should be the least prepared country for the coronavirus shocks due to its economic exposure and its lack of state commitment to reducing social risk. Conversely, Spain and Australia should be best prepared with South Korea and South Africa representing mixed models.

Table 7 illustrates the health impacts of coronavirus on the selected case countries as of August 20, 2020. The table presents the total number of cases in each country as well as the number of deaths and the case fatality rate. The table indicates clear patterns as South Korea, Australia and South Africa indicate extremely low case fatality rates compared to Spain and Mexico, which represent the extremes in our vulnerability scales presented above. Can this seeming paradox be explained?

In order to address this question, Table 8 examines the policy responses to coronavirus in the selected case countries according to four policy dimensions: control and tracing measures, health care investments, financial support to workers, businesses, and sectors and family

Country/Data	Cases	Deaths	Case fatality rate
South Korea	16.670	309	1.9
Australia	24.407	472	1.9
Spain	377.906	28.813	7.8
Mexico	543.806	59.106	10.9
South Africa	599.940	12.618	2.1
Source(s): Table compiled by authors			

Country/ Policy	Control and tracing measures	Health measures	Employee/Business support	Family assistance/ Income support
South Korea	Virus testing and contact tracing; no lockdowns; strict social distancing	Mental health response; limited special measures: more focus on prevention	US$200bn aid for worst-hit industries, small businesses and workers (job protection); public support as investment in major industries	Universal Disaster Relief Fund: 9.1tn won or 7.4bn US dollars (first direct payment ever in South Korea)
Australia	Closure of border and restrictions for international travelers; national disease tracking database; limit exposure of people in high-risk groups; Physical distancing; school closures; temporary prohibition on the noncommercial exports of certain health items	Increase number of staff members available; set up COVID-19 clinics; establishment of protocols and laboratory testing	Providing $259bn or 13.3% of GDP in support for workers, households and business: Job Keeper Payment; temporary cash flow payments up to $100000 are available to small-medium size businesses in order to help them operate, pay bills and retain staff members; Eligible businesses are offered a 50% wage subsidy to retain apprentices and trainees; Government provision of credit and loans	Pensioners, seniors, careers, student payment recipients who are eligible will receive $750 as Economic Support payments; The government has supported severely affected regions, communities and industries with $1bn COVID-19 Relief and Recovery Fund
Spain	"State of Alarm": the circulation of citizens is restricted, the supply of food and products necessary for public health is guaranteed, the opening of the hotel, restaurant and premises where cultural, artistic, sports and similar activities are carried out is regulated, distance work is prioritized and face-to-face school activity is suspended	Seroprevalence studies suggested by WHO in place of widespread testing	Particular emphasis on the tourism industry, small and medium size enterprises (SMEs), and the self-employed, as well as persons affected by the containment measures The government launched a package of 200bn euros (of which 117bn euros in public funding) which is 20% of GDP; different forms of credit and duty relief	Minimum vital income of 463 euros per month (per single adult; more for families); extension of unemployment benefits; support for seasonal contracts in tourism

Table 8.
Policy responses to coronavirus pandemic in selected cases by dimension

Country/ Policy	Control and tracing measures	Health measures	Employee/Business support	Family assistance/ Income support
Mexico	Schools closed; social distancing recommended	Mathematical simulations to study the infection process; austerity program so reluctance to spend money on wide-scale testing; The Mexican Navy announced it would open 10 voluntary self-isolation units to shelter 4,000 COVID-19 victims in Mexico City, Guerrero, Jalisco, Michoacán, Sinaloa, Tamaulipas and Veracruz	President López Obrador issued a decree to abolish 100 public trusts related to science and culture; the Finance Ministry (SHCP) will receive the money directly. The move is expected to save MXN $250bn (US$10bn), which can be spent to strengthen the economy, pay for social programs and pay off the debt; MXN$60 billion (US$2.5bn) to help small businesses in May in form of 3 billion loans	No support
South Africa	Declaration of State of Disaster; Disaster Management Act which facilitates one of world's strictest lockdowns; National Coronavirus Command Council; Restrictions on Movement and borders closed	Mobile testing units; 10,000 new ventilators; implementation of recent universal health care law	$26bn fiscal stimulus package (almost 10% GDP): allocated toward guarantees to banks so as to encourage lending, protection and creation of jobs, and welfare grants to the poor and unemployed	No support

Source(s): Table compiled by authors

Table 8.

assistance/welfare. The model presents interesting combinations of policy responses. South Korea and Mexico avoided lockdowns and border closures, unlike Australia, Spain and South Africa. This permitted both of these countries to pursue global economic exchanges. South Korea, however, has been promoted as a "best practice" example of coronavirus response by international organizations due to the coherence of policies surrounding this decision. First, the government implemented a technological approach to the pandemic by establishing mobile testing and tracing practices. Economically, the South Korean government invested heavily in the economy which limited the negative economic impacts of the pandemic (see Table 8). While manufacturing, retail and tourism have suffered, pharmaceuticals, computers and telecommunications have thrived in the coronavirus economy. Of course, these specialized industries concentrate profits, thus exacerbating inequalities in Korea. Even though the government enacted direct social payments, specific groups, such as young informal workers and above all, senior citizens have suffered

economically. South Korea has the highest rate of poverty among the elderly in the OECD (OECD, 2020).

By contrast, the Mexican response to coronavirus has led to systemic socioeconomic problems in the country. It has the highest case fatality rates among the countries studied here indicating difficulties in the national health care system as well as systemic problems regarding access to care. In terms of the socioeconomic impacts of coronavirus on the country, the lack of government support for economic subsidies (President Andrès Manuel Lopez Obrador has labeled them "neoliberal" policies which he opposes) has contributed to high unemployment and important increases to the number of people living in poverty (see Table 9). In fact, the decision to avoid border controls and lockdowns, combined with the disruption of supply chains in the Mexican economy, the free fall in global oil prices and the lack of government social investment has been a recipe for disaster in terms of vulnerabilities and inequalities in the country because these strategies have contributed to both exposure and risk as defined above.

Country	Project change GDP, 2020%	Post-COVID-unemployment %	Post-COVID poverty
South Korea	−2.5	4.5	n.a
Australia	−4.8	10	505,000
Spain	−11.6	15.3	700,000
Mexico	−8.97	10.7	8.9 million additional people in poverty and 7.7 million additional people in extreme poverty
South Africa	−5	30	1 million

Source(s): Table compiled by authors

Table 9.
Selected socioeconomic impacts of coronavirus on case countries

In many ways, public policies have also determined coronavirus impacts in Australia, Spain and South Africa. Spain is a case which stands out because of the country's regional context. The country's case fatality rate is high because it was one of the earliest epicenters of the pandemic and Spain has an aging population. However, since the initial impact of the pandemic, the Spanish government has been able to control the mortality of the disease. The economic impacts of the pandemic have been quite strong in Spain. The country's macroeconomic policies described above have exposed citizens economically due to dependence on international tourism (it ranks second in the world) and related services, agribusiness and manufacturing exports. The pandemic disrupted these activities and led to significant increases in unemployment resulting from exposure to external shocks. At the same time, Spain's membership in the European Union allowed the government to invest heavily in welfare through the belief that the EU would eventually approve a solidarity fund for member states. This mitigated increases in poverty within the country through social programs aimed at reducing risk. In fact, the EU member states agreed on a €750bn coronavirus recovery fund in July 2020.

South Africa and Australia, on the contrary, are members of regional organizations which are dependent on their funding so they could not count on such support. In South Africa, the national lockdown was an important step for controlling the health impacts of coronavirus as the case fatality rate remains low, which is remarkable for a country characterized by widespread informality and poverty. At the same time, the lack of institutional capabilities and availability of funds has unsurprisingly limited state responses to unemployment and rising coronavirus-stimulated poverty. Studies of the impacts of the pandemic (see UNDP, 2020) illustrate how female-headed households are especially vulnerable to poverty which also follow racial hierarchies in the country (black South Africans suffering the most).

Finally, Australia was able to mitigate the health and socioeconomic impacts of coronavirus (so far) by complementing lockdowns with investments in health care, employment insurance, small business subsidies and social programs. This approach, which deviates from the welfare model described above, can be considered coherent for the mitigation of vulnerability because it complements and coordinates the four sectors of coronavirus policy. Some problems exist with this response as indigenous communities and poor youth have been identified as at-risk populations, but this coherence has more globally mitigated coronavirus impacts as a multifaceted threat to Australia's population. What is interesting about Australia's response is that many discussions of coronavirus view health and economic well-being as a trade-off that cannot be reconciled. PCD approaches aim to address such situations. This is discussed in the conclusion below.

Conclusions

In many countries of the world, public debates surrounding coronavirus responses have focused on the supposed need to choose either public health or economic recovery strategies which have been presented as mutually exclusive goals. This article addresses this discussion through a PCD approach.

PCD has been criticized by scholars for its focus on "coherence" at the expense of defining "development." At the same time, many scholars have praised this approach for its focus on reconciling trade-offs like the ones presented by the coronavirus pandemic. This article employs a PCD analysis, thus recognizing the need to focus policy discussions on sectoral trade-offs. However, it introduces a "normative coherence for development" perspective in order to highlight development models that address vulnerabilities which have left countries susceptible to the pandemic's health and socioeconomic impacts (see Puerta Silva *et al.*, 2020).

This article recognizes these vulnerabilities as socially constructed conditions. Employing a PCD approach, this analysis has indicated that sectoral policies have contributed to or mitigated underlying vulnerabilities through their macro-economic strategies that have often led to exposure to external shocks, their infrastructure and taxation policies which affect institutional coping capacities and social integration commitments that either address or exacerbate domestic social divisions that impact risk. Our quantitative analysis has indicated that the pandemic has affected different world regions in different ways and to different extents. This analysis is based on the European Commission's risk assessment index which is an aggregate scale that includes different types of risk indicators. Such statistical analysis already confirms the multifaceted nature of socioeconomic vulnerability and its importance in understanding the pandemic's effects. PCD permits us to better understand the relationships between these different aspects of vulnerability.

For this reason, this article presents coherence for vulnerability in development as a conceptual notion that needs to be addressed in national and international coronavirus strategies. Because vulnerabilities are multisectoral, this notion that states must choose between health and socioeconomic well-being is a false narrative. Only by addressing both aspects of the coronavirus crisis can states effectively combat the pandemic. The policy research presented above has shown how Australia has implemented the most comprehensive pandemic response which has mitigated its general effects on the country. Conversely, Mexico has continued to promote economic exposure, its limited response has undermined institutional capacities to implement health strategies and the current government has openly opposed any payments for small businesses and workers. This piecemeal and superficial response to the pandemic has contributed to elevated suffering in terms of both public health and socioeconomic well-being. This pandemic requires a systemically coherent response which simultaneously addresses immediate policy necessities and underlying vulnerabilities. Unless governments address these

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vulnerabilities through PCD approaches, they will not be able to overcome overlapping pandemic crises. A "return to normal" will not be effective because "normal" policy approaches are what constructed the vulnerabilities which the coronavirus pandemic has presently exposed.

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Appendices

Dimension	Category	Component	Subcomponent	
Hazard and Exposure	Person to person	Population	Population density	
			Urban population growth	
			Population living in urban areas	
			Population living in slums	
			Household size	
		Wash	Sanitation	
			Drinking water	
			Hygiene	
	COVID-19 Vulnerability	Movement	International movement	
			Internal movement	
		Behavior	Awareness	
			Trust	
Vulnerability		Demographic and Comorbidities	Proportion of the population at increased risk of severe COVID-19 disease	*Inform COVID-19 Risk Score*
	INFORM Vulnerability	Socioeconomic Vulnerability	Development and deprivation	
			Inequality	
			Economic Dependency Index	
		Vulnerable groups	Uprooted people	
			Gender-based violence	
			Health conditions	
			Food Security	
Lack of coping capacity	COVID-19 Lack of coping capacity	Health capacity	Health system capacity to COVID-19	
	INFORM Lack of coping capacity	Institutional Infrastructure	Governance	
			Access to health care	

Source(s): INFORM COVID-19 Risk Index (2020)

	International trade policy	Business policy	Finance	Tourism	Agriculture and food policy	Infrastructure	Taxation policy	Labor policy	Migration policy	Natural resources	Unemployment insurance	Health policy	Antipoverty
South Korea	Pursuit of regional and bilateral free trade agreements; Policies aimed at enhancing the international competitiveness of exports	Government support for export-oriented large firms	The Financial Services Commission is a central government body responsible for financial policy and financial supervision; The FSC has statutory mandates to draft and amend financial laws and regulations; supervise, inspect and sanction financial institutions; issue regulatory licenses and approval to financial institutions; oversee capital markets; and supervise foreign exchange transactions conducted by financial institutions to ensure their financial soundness	Investments in connectivity; easing of standards for the issue of visas and simplifying the entry process for international visitors to Korea; Tourism Development and Promotion Fund	Market price support replaced by direct income support to address urban–rural inequalities; focus on food chains and systems rather than production (import dependence)	Increase infrastructure through public–private investment; stimulate industrialization	Graduates income tax rate for residents; fixed rate for nonresidents; Corporate income taxes between 10 and 20%; VAT	Improve the quality of life for employees while increasing compliance challenges for employers; Reduction of retirement income tax threshold for executives; expansion of 52-hour work week; Paternity leave law has increased to 10 days of paid leave	World Class Korea with open borders; National competitiveness; Attracting talent; Attracting foreign workers for balanced national development; Creating a foreigner-friendly living environment	Lacking clear direction, South Korea's environmental policies fall into the bottom ranks (rank 36) in international comparison; Privilege economic growth over sustainable resource management	Minimum benefit of 90% of working wage; The duration of the benefit can be extended to 240 days depending on the age and the duration of the beneficiary's unemployment insurance status; Education and training Opportunities for Unemployed; Employment Insurance pays for unemployed workers' education fee if the beneficiary voluntarily applies to a training program for the purpose of seeking reemployment	South Koreans have access to a universal healthcare safety net, although a significant portion of healthcare is privately funded. In 2015, South Korea ranked first in the OECD for healthcare access	The Basic Livelihood Security Program (BSLP) is a welfare system that provides cash payments and other benefits, such as housing and education, for citizens living in absolute poverty. Strict criteria for support

Table A2.
Policy characteristics and their relationship with vulnerability

	International trade policy	Business policy	Finance	Tourism	Agriculture and food policy	Infrastructure	Taxation policy	Labor policy	Migration policy	Natural resources	Unemployment insurance	Health policy	Antipoverty
Australia	Pursuit of regional and bilateral trade agreements; Trans-Pacific Partnership	Protection of consumers, the environment and the community, as well as to promote fair trading and competition	Formally, there is extensive and detailed regulation of Australia's banking system, split mainly between the Australian Prudential Regulation Authority (APRA) and Australian Securities and Investments Commission (ASIC). The Reserve Bank of Australia also has an important involvement. However, in practice, banks in Australia are self-regulated through external dispute resolution (EDR) schemes, the most prominent of which is the Australian Financial Complaints Authority (AFCA)	Increase consumer spending and address supply-side factors; encourage high-quality tourism experiences, including Indigenous tourism; limit the tax, red tape and other regulatory burden; marketing; development of tourism infrastructure	General Services, particularly in research and development; sustainable resource use; climate change, drought and risk management	Shift from systematically directly providing infrastructure to creating competitive markets where competing public and private suppliers can provide infrastructure efficiently; focus on efficiency, productivity and growth	Income taxes are primary source of revenue; Australia maintains a relatively low tax burden in comparison with other wealthy, developed nations, at 27.8% of GDP in 2018	Sets minimum wage; establishes labor union rights; addresses discrimination	attracting workers and temporary (skilled) migrants in order to meet the skilled labor, driven by the demands of Australian industry or needs of the economy; family stream	The Australian Government recognizes that national leadership is required to protect Australia's natural resources and facilitate sustainable and productive management of agricultural land and its soil, vegetation and other biodiversity assets, support viable rural communities and better engage with Indigenous Australians in these actions The National Landcare Program underpins Australia's efforts in assisting best practice natural resource management. The National Landcare Program Phase Two has recently been announced with a number of funding opportunities available	Privatized unemployment insurance; There is no compulsory national unemployment insurance fund	Australia has a highly developed health care structure, though because of its vast size, services are not evenly distributed. Health care is delivered in Australia by both government and private companies which are often covered by Medicare	Means-tested programs which have specific foci and specific time periods

(continued)

Table A2.

	International trade policy	Business policy	Finance	Tourism	Agriculture and food policy	Infrastructure	Taxation policy	Labor policy	Migration policy	Natural resources	Unemployment insurance	Health policy	Antipoverty
Spain	EU member: Pursuit of trade growth; "Trade for All" including transparency, responsibility and sustainability	EU member: industry competitiveness and innovation; circular economy; support for small business	Committed to regulation of finance in multilateral cooperation	Stimulate growth of tourism; three pillars of sustainability; socioeconomic, environmental and territorial. a participatory process; improving competitiveness and profitability; preserve natural and cultural value; promote equitable distribution of the benefits and burdens of tourism	EU member: Common Agriculture Policy focused on modernization, production and export. Led to divisions between large and small holdings	EU structural funds for lagging regions; Investment policy has aimed to simultaneously promote growth and address regional asymmetries	A wide range of taxes are levied on different sources, the most important ones being income tax, social security contributions, corporate tax, value added tax; graduated income tax rates; flat corporate rate	Very comprehensive and provides significant protection for employees. The labor law regulates individual and collective relationships between employees and employers, the scope of which extends to other related areas such as Social Security, health and safety at work, special employment relationships and procedural law	Use of bilateral deals with non-EU countries that stipulate broader cooperation in the return for accepting low and medium-skilled migrants; system not only provides channels for employers to sponsor workers, but also enables recruitment of migrants from these signatory countries to work in sectors such as agriculture, construction or hospitality	Member of the EU which regulates national resources through supranational directives. National legal framework	Contributory benefits are payable to those unemployed persons with a minimum of 12 months' contributions over a period of 6 years preceding unemployment. The benefit is payable for 1/3 of the contribution period. The benefit amount is 70% of the legal reference salary plus additional amounts for persons with dependents. The benefit reduces to 60% of the reference salary after 6 months. The minimum benefit is 497 euros per month and the maximum is 1087.20 euros per month for a single person	The health system in Spain stands out for its impressive during the past decades. Across OECD countries, Spain currently ranks second in terms of life expectancy at birth and at the age of 65 years, only behind Japan. However, factors such as a high share of out of pocket spending or a relatively low level of health professionals continue to impair higher health system performance	Implementation of a national minimum income scheme; Social investment; education and training; social protection against risk (family and health investments); coordination of services

(continued)

	International trade policy	Business policy	Finance	Tourism	Agriculture and food policy	Infrastructure	Taxation policy	Labor policy	Migration policy	Natural resources	Unemployment insurance	Health policy	Antipoverty
Mexico	Mexico has a broad network of Free Trade Agreements (FTA): 10 FTAs in force with 45 countries	Focus on addressing productivity gap between small and large firms; regularization of informality	Financial regulation remains problematic as it is tied to Mexico's security problems. Also, attempts to diversify the economy promote foreign investment	Priority economic sector in National Development Plan; Promotion of coastal resorts and investment in transport and infrastructure; access to credit	Strong focus on modernization, production and export	Massive investment in highways, airports, telecommunications and tourism infrastructure (in association with free trade)	Income and corporate taxes established at international standards; VAT established at international standards; SAT on digital services; all indexation of personal and enterprise profit tax for inflation, the full integration of these two taxes to avoid the double taxation of dividends, and the application of a minimum tax on gross assets, to which the enterprise profit tax is creditable, to combat tax evasion. The structures of the VAT and excise taxes are also on the whole quite adequate; does not generate revere	Labor requirements dictated under Chapter 23 and Annex 23-A of the recently signed US–Mexico–Canada Agreement; establishes a labor court; governs union and collective bargaining regulations and measures against discrimination	The Mexican government has instituted a new migration policy based on two main pillars: defending migrants' rights and taking a humanitarian approach to economic development in order to address the structural causes of migration; Due to US pressure, efforts to prevent migration through multilateral development cooperation and border controls	Mexico has enacted institutional reform regarding natural resources but implementation has varied due to incomplete or unclear obligations	There is no compulsory national unemployment insurance fund, only in Mexico City	Healthcare in Mexico is provided by public institutions run by government departments, private hospitals and clinics, and private physicians. It is largely characterized by a special combination of coverage mainly based on the employment status of the people. Every Mexican citizen is guaranteed no cost access to healthcare and medicine according to the Mexican constitution and made a reality with the "Institute of Health for Well-being," or INSABI. Coverage problems for rural or impoverished communities	Integrated approach to poverty alleviation through the development of human capital. Extension of coverage to the urban poor and aiding high school students

(*continued*)

Table A2.

Table A2.

	International trade policy	Business policy	Finance	Tourism	Agriculture and food policy	Infrastructure	Taxation policy	Labor policy	Migration policy	Natural resources	Unemployment insurance	Health policy	Antipoverty
South Africa	Limited regional FTAs is line with SDAC development; FTA with European Union; inclusion of small business	Local Business Program with focus on SMEs	Fragmented financial regulation system. Twin Peaks model aiming to guarantee financial stability	Framework calls for South Africa to position itself as the higher education hub of the African continent	Job creation; financial support for small holders; improvement of working and living conditions for farm workers	Job creation; citizen access to services; Investment in the construction of ports, roads, railway systems, electricity; faster economic growth	Change from "source-based" to "residence-based" taxes; income tax, VAT and corporate tax; burden on individuals more than corporations	Ensure decent work for all workers Protect the employment relationship Avoid exploitation of workers; regulate contract work, subcontracting and outsourcing, Address the problem of labor broking and prohibit abusive practices Facilitate unionization of workers Ensure the right to permanent employment for affected worker	Restrictive migration; border security; only recruitment of skilled migrants; Since 1994, South Africa has deported 1.7 million undocumented migrants to neighboring states like Mozambique, Zimbabwe and Lesotho. In 2006 alone, 260,000 migrants were arrested and deported	Issues; the ability to ensure effective regulation • the lack of accountability at a variety of levels, and • the failure to engage the private sector and civil society actors in order to strengthen our management of water resources.	The unemployment insurance system is a system offering subsistence income to eligible recipients to alleviate the harmful social effects of income loss due to unemployment shocks	NHI seeks to realize universal health coverage for all South Africans. This means that every South African will have a right to access comprehensive healthcare services free of charge at the point of use at accredited health facilities such as clinics, hospitals and private health practitioners	Creation of economic opportunities; education; promotion of social cohesion

Source(s): Table compiled by authors

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