

## Causal model of social protection stratification effects and implementation

[Extract from Book, Chapter 3 Framework, to get a clean copy but edited and addition of materials that were dropped.]

### Table of contents:

*Causal model of social protection stratification effects and implementation 1*

*Framework. 2*

*Testing the framework. 2*

*Origins. 3*

*Stratification effects. 5*

    employment first 5

    politics first 6

    policy first 7

    Simultaneous/joint effects 7

    Additive or multiplicative effects 8

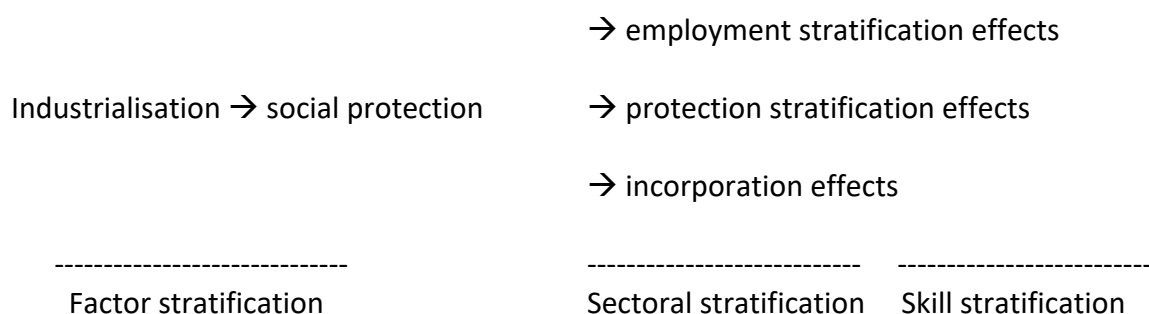
*Diachronic. 8*

*References. 9*

Framework.

The structure of the argument in the book focuses on the causal links existing between its components. The analytical framework can be described succinctly. Industrialisation is the main causal factor in the emergence of social protection institutions through the creation of an urban wage earner class wholly reliant in their capacity to sell their labour. Once social protection institutions are in situ, they effect further stratification effects within the wage earner class. Here we are especially interested in employment effects, protection effects, and political incorporation effects. Figure 3.1. describes the main causal linkages and dominant forms of stratification.

Figure 3.1. A causal framework.



This framework represents a confluence of synchronic, diachronic, and analytical perspectives on social protection institutions in the region. They will be discussed in turn below.

Testing the framework.

Now that the different components of the framework are in place, the next task is to identify empirical counterparts, collect the necessary data, and test the validity of the causal links suggested by the discussion.

Testing for the framework comes in two parts. The first part will focus on the relatively easier task of establishing the causal link between industrialisation and the emergence of occupational insurance funds. The second part will examine the causal links existing between social protection institutions and their stratification effects.

Origins.

The first part is relatively straightforward because the causal link existing between industrialisation and social protection institutions is widely accepted in the literature. The less straightforward task is to identify appropriate empirical counterparts and to select an appropriate statistical method to test their relationship.

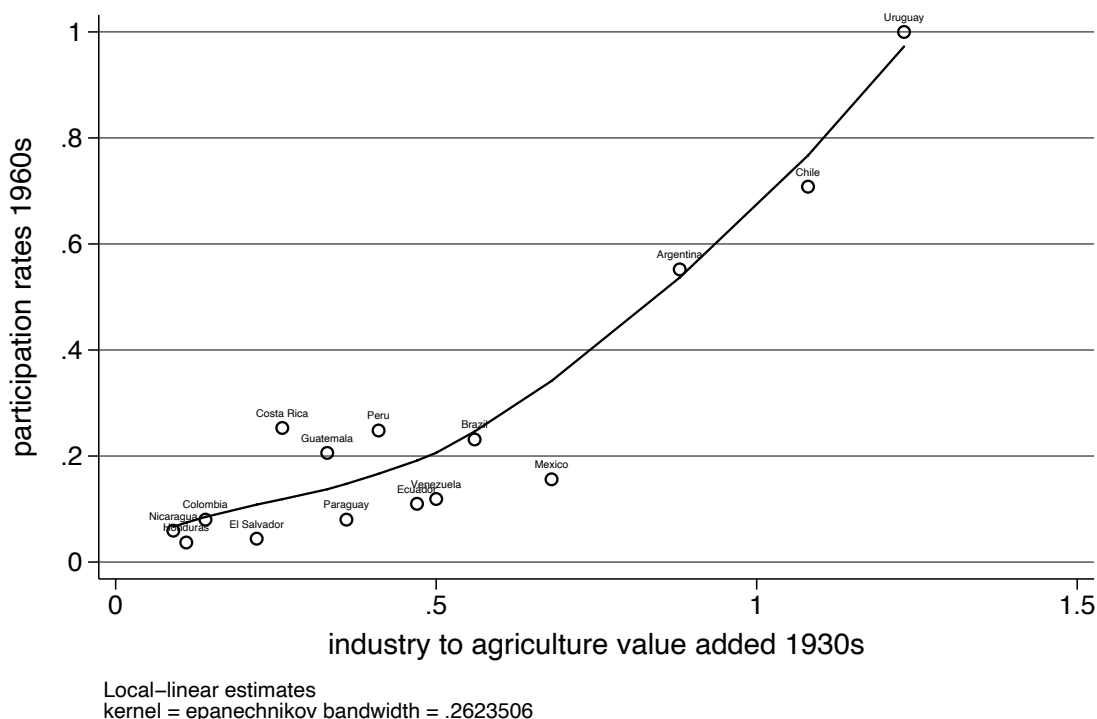
The causal model can be described as: Industrialisation --> Occupational insurance funds. To capture industrialisation the model will rely on a measure of the ratio of manufacturing value added to agriculture value added. The relevant annualised data has been consolidated and harmonised in the Montevideo-Oxford Latin America dataset and covers all the countries in the region from the beginning of the 20<sup>th</sup> century (MOxLAD, n.d.). This ratio is a reliable measure of industrialisation. It rises with industrialisation, and it rises faster in the countries that industrialised more intensely.

The share of the labour force participating in occupational insurance funds offers a good measure of expansion of occupational insurance funds. It is important to keep in mind several issues regarding these data. Cross-country comparable measures of the participation share can be sourced from administrative data and from survey data. Early administrative data are not very reliable because of differences in the way they were constructed in different countries. This is especially true in the period before governments moved to consolidate the governance of occupational insurance funds. Mesa-Lago (1978) provides an early cross-country comparable data on participation and he carefully describes the weaknesses associated with these data. More recently, Arenas de Mesa (2019) constructs a series on administrative data from 2000 to 2018. He also describes with care the weaknesses associated with the data series. Survey data provides an alternative source of participation share data. These data are patchy in its coverage before countries began to collect regular household surveys in the mid-1990s. For our purposes this is significant because the expansion of occupational insurance funds in the region spans the period 1950s to 1970s. There is therefore a trade-off between focusing on earlier periods with data for fewer countries available or focusing on later periods with data available for most, if not all, countries.

To maximise the reliability and coverage of the data, the analysis below will work with decade averages.

The simplest model to estimate the causal effect of industrialisation on the expansion of occupational insurance fund participation is to regress participation shares on earlier industrialisation with country level data. This strategy has the advantage of avoiding post-treatment bias and minimising omitted variables bias (Blackwell & Glynn, 2018).

Figure 3.2. Industrialisation and occupational insurance fund participation.



*The Figure shows the relationship existing between industrialisation, measured by the ratio of industry to agriculture value added and occupational insurance fund participation in the 1960s. It indicates a non-linear relationship between measures of industrialisation and subsequent measures of occupational insurance participation rates.*

The Figure reports on the crosstabulation of industry to agriculture value added on occupational insurance funds participation rates in 1960. The latter comes from Mesa-Lago (1978) figures from administrative data. It is important to keep in mind the deficiencies of these data as reported by him. The issue of double counting in contexts where workers could affiliate to multiple insurance funds is apparent for Uruguay. Delayed and irregular updates of the insurance fund records overestimate participation rates. The fitted line is from a nonparametric kernel regression. The line indicates a non-linear relationship existing between early industrialisation and the expansion of occupational insurance fund in the immediate post-WWII period. Given the period captured in the data, the exercise offers some support for the causal relationship hypothesised above. Industrialisation leads to the expansion of occupational insurance funds in Latin America.<sup>1</sup>

<sup>1</sup> Including expert assessment of trade union engagement as a share of the population and of the influence of economic power in political decision making in the model failed to add information.

Stratification effects.

Once social protection institutions are in place the focus shifts to testing for the stratification effects of social protection. The framework developed in this chapter identifies three important areas of stratification which are the focus of analysis: employment, protection, and incorporation. The analysis below examines the causal effects linking social protection institutions and their effects on these three areas. It also examines the relationship between these areas.

The general model is: Social protection --> [employment | protection | incorporation]. Define 's' for social protection, 'e' for employment, 'p' for protection and 'i' for incorporation. We are now able to examine alternative configurations of the three sets of effects, drawing insights from the existing literature in social protection.

The literature on social protection institutions in Latin America suggests it is less likely that these effects are independent from each other. Disciplinary boundaries often result in research investigating these effects on their own, say, labour economists studying employment effects, social policy scholars considering protection effects, and political science researchers looking at the electoral effects of social protection. It is also the case that disciplinary studies often cross these boundaries and point to the appropriateness of accounting for the relationships existing between these effects and the need to pay attention to their ordering. Alternative theorising of these orderings is at the core of alternative explanations of social protection in Latin America, and elsewhere.

Possible orderings of causal links, and the relevant literature, are discussed in turn below. Orderings are represented by moving from inside the brackets to outside them. Arrows represent the direction of causality.

employment first

$i(p(e)) \leftarrow s$  stands for employment first:  $incorporation \leftarrow protection \leftarrow employment$ .

This is the configuration of causal links common in studies of social protection in Latin America, and elsewhere. It is dominant in labour economics, for example in microfoundational explanations of the role of pensions in shaping employment relationships, recruitment, retention, firm-specific skill investment, and productivity (Ippolito, 1997; Lazear, 1983). This is also dominant in Varieties of Capitalism approaches to social protection, see Iversen and Soskice's asset theory (2001, 2015). From this perspective, economy wide changes in employment cascade into protection and incorporation. Arguably, this could be described as the underlying model in Segura-Ubiergo and in Haggard and Kaufman's approach to social protection and more generally in industrialisation theories of social change.

$p(i(e)) \leftarrow s$  is a possible variant of the employment first configuration. Here incorporation comes before protection. It fits bottom up perspectives on the incorporation of workers in Latin America (Collier & Collier, 1991). It also fits well with Mesa-Lago model of interest group pressure leading to social protection institutional development. It fits with corporatist models of incorporation in the region, especially Argentina (Isuani, 2008; Malloy, 1979). It does not fit well with top down models of incorporation, where authoritarian elites introduce social protection as a means to delaying incorporation (Filgueira, 2005; Mares & Carnes, 2009).

politics first

$e(p(i)) \leftarrow s$  stands for politics first: employment  $\leftarrow$  protection  $\leftarrow$  incorporation.

In this configuration, incorporation is the primary effect, leading to demands for social protection which in turn influence employment. It is closest to the power resources approach, where social protection is a consequence of democratic struggle (Korpi, 1980). It is also present in approaches to social protection institutions emphasising the primary role of democracy in enabling social demands to gather force. In a welfare state context, social protection institutions are considered as the 'linchpin of democracy and capitalism' (Beramendi et al., 2015). They are essential to ensure that the destructive forces of capitalism are moderated, the essence of European social democracy. Iversen and Soskice (2006) description of social protection provision to the less skilled sector of the economy as wholly dependent on the participation of political parties representing the interests of workers in this sector in governing coalitions is another example of this configuration.

In the Latin American context, the discussion surrounding the politics of social assistance takes for granted a model with these characteristics (Levitsky & Roberts, 2012; Silva & Rossi, 2017). The politics first approach fits a version of the emergence of social assistance as predicted on elite responses to electoral competition (Garay, 2016). It also fits accounts of the second wave of incorporation. Direct access to social policy formulation by social movements and political groupings, or the emergence of political groupings from political movements in the process of re-democratisation, results in social assistance programmes that facilitate and support employment of low-income workers.

Discussions of the retrenchment phase in Latin America depart from a negative version of the politics first variant:  $-e(-p(-i))$ . Limited incorporation undermines protection resulting in a downgrading of labour standards and employment. It also applies with force to explanations for the undeveloped social protection in Central American countries (Sánchez-Ancochea & Martínez Franzoni, 2015).

Inverting the relationship between employment and protection, as in  $p(e(i))$ , appears less promising as a model, except perhaps as a reinforcement of the cycle. It could provide an insight into the incorporation of women politically. The hypothesis is that women's political participation leading to the reduction of discrimination in employment would enforce changes

in protection. Studies on the evolution of family benefits, maternity provision for example, fail to confirm this sequence (Rossel, 2013).<sup>2</sup>

policy first

$e(i(p)) \leftarrow s$  stands for policy first: employment  $\leftarrow$  incorporation  $\leftarrow$  protection.

In policy first models, a change in policy leads to changes in incorporation and eventually employment. Baldwin's (1990) description of occupational insurance is a good example of this ordering. Occupational insurance pools groups of workers with similar social risks who then vie for state legal recognition and support leading - in a context of expanding franchise and competitive electoral processes - to incorporation and a stable employment structure. Criticism of occupational insurance funds during the retrenchment phase emphasised their role in preventing structural adjustment, prolonging unemployment, and increasing informality. Levy (2008) argues that the interaction of occupational insurance and social assistance reinforces informality in Latin America.

$i(e(p)) \leftarrow s$  is less likely in the Latin American context.

Although there is a version of this ordering in economic narratives behind labour market liberalisation. The narrative proposes that dismantling employment protection legislation and replacing occupational insurance plans with individual retirement savings accounts would enable changes in employment via worker mobility and firm employment of workers in non-standard contracts under the assumption that protection costs prevent firms from increasing employment. Restrictions on trade unions, such as restricting unionisation to firm or plant level has implications on incorporation. The dominance of 'informal' employment in the region suggests this is at best a narrative.

Simultaneous/joint effects.

What about joint effects? In theory, it is also possible to propose joint effects:

$i(p, e) \leftarrow s$  describes the joint effects of employment and protection influencing incorporation. It fits with accounts of employment first social protection effects with dominant trade unions in the first incorporation phase. It does not fit with conditions in which weaker or radical trade unions focus on local self-protection. This resonates with early industrialisation (Illanes, 2003).

$e(p, i) \leftarrow s$  could apply to social assistance expansion in Latin America. For example, potential effects of social assistance transfers on reservation wages in turn having an influence on employment. Accounts of older people's labour supply responses in rural areas, with a

---

<sup>2</sup> A study on the effects of women's franchise on public expenditure in Latin America fails to confirm the presence of a strong link (Aidt & Jensen, 2009).

reduction in labour hours or a re-configuration of paid labour/care/self-employment are a case in point. However, the size of the effects when aggregated are likely to be small.

$p(e, i) \leftarrow s$  combines the policy and politics first approaches.

However useful to identify the assumptions underlying theorisation on social protection, in terms of implementation, it might be preferable to start with single orderings.

Additive or multiplicative effects?

Assuming the feasibility of an index  $m$ ,  $m(p, e, i)$  ordering can be conceived as additive:  $m(p + e + i)$ ; multiplicative  $m(p \times e \times i)$ ; or combinatorial  $m(p, e, i)$  with or without weights.

Discuss Mullahy approach to multiple treatments: (Mullahy, 2018). Estimate ATE for each outcome  $m$  of  $M$ . Summarise outcomes  $M$  in an  $M$ -component vector, for example by adding them up. Estimate an  $M$ -dimension outcome for each unit.

Diachronic.

In the diachronic phases, there are several issues to address and choices to make.

**First incorporation** is the most straightforward because the model captures the effects of industrialisation on the emergence and spread of occupational insurance schemes, only one institution. It also studies the effect of emerging occupational insurance funds on employment, protection, and incorporation.

Time period is 1960s and 1970s.

**Retrenchment** involves two institutions Occupational Insurance Funds and Individual Retirement Savings Plans in different combinations for different countries.

Time period is 1980s and 1990s.

**Second Incorporation** is the most complicated because of the presence of three main institutions in different combination in different countries and with contrasting effects - positive and negative - on the three main stratification dimensions.

Therefore estimate separate models for insurance and assistance.

Time period is 2000-2020.



## References.

- Aidt, T. S., & Jensen, P. S. (2009). Tax structure, size of government, and the extension of the voting franchise in Western Europe, 1860-1938. *International Tax and Public Finance*, 16, 362–394.
- Arenas de Mesa, A. (2019). *Los sistemas de pensiones en la encrucijada. Desafíos para la sostenibilidad en América Latina* (159; Libros de La CEPAL). Comisión Económica para América Latina y el Caribe.
- Baldwin, P. (1990). *The politics of social solidarity. Class bases of the European welfare state 1875-1975*. Cambridge University Press.
- Beramendi, P., Hausermann, S., Kitschelt, H., & Kriesi, H. (2015). *The politics of advanced capitalism*. Cambridge University Press.
- Blackwell, M., & Glynn, A. N. (2018). How to make causal inferences with time-series cross-sectional data under selection on observables. *American Political Science Review*, 112(4), 1067–1082.
- Collier, R. B., & Collier, D. (1991). *Shaping the Political Arena*. Princeton University Press.
- Filgueira, F. (2005). *Welfare and democracy in Latin America: The development, crises and aftermath of Universal, dual and exclusionary social states*. UNRISD.
- Garay, C. (2016). *Social Policy expansion in Latin America*. Cambridge University Press.
- Illanes, M. A. (2003). *Chile des-centrado. Formación socio-cultural republicana y transición capitalista 1810-1910*. LOM Editions. <http://www.memoriachilena.gob.cl/602/w3-article-82455.html>
- Ippolito, R. A. (1997). *Pension Plans and Employee Performance. Evidence, Analysis and Policy*. University of Chicago Press.
- Isuani, E. A. (2008). La política social argentina en perspectiva. In G. Cruces, J. M. Moreno, D. Ringold, & R. Rofman (Eds.), *Los programas sociales en la Argentina hacia el Bicentenario* (pp. 169–198). The World Bank.
- Iversen, T., & Soskice, D. (2001). An asset theory of social policy preferences. *American Political Science Review*, 95(4), 875–893.
- Iversen, T., & Soskice, D. (2006). Electoral institutions and the politics of coalitions: Why some democracies redistribute more than others? *American Political Science Review*, 100(2), 165–181.
- Iversen, T., & Soskice, D. (2015). Politics for markets. *Journal of European Social Policy*, 25(1), 76–93.
- Korpi, W. (1980). Social Policy and the Distributional Conflict in the Capitalist Democracies: A Preliminary Comparative Framework. *West European Politics*, 3, 296–316.
- Lazear, E. P. (1983). Incentive effects of pensions. *NBER*.

- Levitsky, S., & Roberts, K. M. (2012). *The Resurgence of the Latin American Left*. The John Hopkins University Press.
- Levy, S. (2008). *Good Intentions, Bad Outcomes. Social Policy, Informality and Economic Growth in Mexico*. The Brookings Institution.
- Malloy, J. M. (1979). *The politics of social security in Brazil*. University of Pittsburgh Press.
- Mares, I., & Carnes, M. (2009). Social Policy in Developing Countries. *Annual Review of Political Science*, 12, 93–113.
- Mesa-Lago, C. (1978). *Social Security in Latin America: Pressure Groups, Stratification, and Inequality*. University of Pittsburgh Press.
- MOxLAD. (n.d.). *Montevideo-Oxford Latin American Economic History Data Base* [Database]. Montevideo-Oxford Latin American Economic History Data Base. <http://moxlad.cienciassociales.edu.uy/en#>
- Mullahy, J. (2018). *Treatment effects with multiple outcomes* (NBER Working Paper 25307; NBER Working Paper). National Bureau of Economic Research. <http://www.nber.org/papers/w25307>
- Rossel, C. (2013). *Políticas para las familias en America Latina: Panorama de políticas de reduccion de pobreza y reconciliacion entre trabajo-familia* [Mimeo]. Universidad Catolica del Uruguay.
- Sánchez-Ancochea, D., & Martínez Franzoni, J. (2015). *La incorporación social en Centroamérica: Trayectorias, obstáculos y oportunidades* (Working Paper 1200). CEPAL-Mexico.
- Silva, E., & Rossi, F. M. (2017). *Reshaping the political arena in Latin America. From resisting Neoliberalism to the Second Incorporation*. University of Pittsburgh Press.