Labor market types and differences in labor market outcomes across countries

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Recent work has documented large differences in labor market behavior across countries. Among rich countries, rates of unemployment in- and outflows are both much higher in the US and Canada than in continental Europe (e.g. Elsby, Hobijn, and Şahin, 2013). Poor countries tend to have even higher rates of churn, in particular high employment exit rates (Donovan, Lu, and Schoellman, 2023). These authors also show that these patterns suggest a more slippery job ladder: workers do not succeed in reaching or persisting in better jobs.

At the same time, recent work on labor market flows in the US has identified different "types" of individuals in terms of their labor market experiences in US data, suggesting a "dual" labor market structure. Using different methods and data, Gregory, Menzio, and Wiczer (2021), Hall and Kudlyak (2022) and Ahn, Hobijn, and Şahin (2023) all find that most individuals in the US belong to "primary" types with high rates of employment and short (if any) unemployment spells.[1] At the same time, all find a "secondary" type that has a high propensity for unemployment, short employment spells, and long unemployment spells. Individuals of this type experience more frequent and protracted unemployment as a result of both lower job finding rates and higher job destruction rates. While this type accounts for less than a fifth of the population, it accounts for more than half of the level of unemployment, and most of the fluctuations of unemployment.

We bring these two strands of the literature together in order to understand whether the cross-country differences in aggregate flows are common across individuals, or a consequence of differences in the prevalence or nature of different types in the economy. For example, a high unemployment rate could (among others) be due to generally lower job finding rates, to a greater share of "secondary" type individuals, or to differences in characteristics of that type. Our findings will matter for understanding the causes of cross-country differences and will inform policy in multiple countries.

To answer these questions, we apply the method of Hall and Kudlyak (2022), which was designed for data from the US Current Population Survey (CPS), to panel data from Canada, France, Brazil, Mexico and South Africa.[2] These data sets have a structure roughly similar to the CPS: The Brazilian Pesquisa Mensal de Emprego surveys individuals twice for four consecutive months, with a gap of 8 months, just like the CPS. The Canadian Labour Force Survey follows individuals for six months in a row. The Mexican,

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[1] See also Ahn and Hamilton (2020). Shibata (2023) estimates a related model with hidden states. Morchio (2020) stresses the importance of early unemployment experiences for later unemployment.

[2] We build individual-level panels in the same way as Donovan et al. (2023).

French and South African panels follow individuals for 5, 4 and 4 quarters, respectively.

Our set of countries, while not large, is informative of economies with a broad range of labor market structures. In our sample, the unemployment rate ranges from 5% and less in Canada and the US to over 22% in South Africa, where the non-participation rate similarly is very high. The aggregate employment to unemployment (EU) flow rate ranges from around 2% per quarter in France to around 3.5% in Brazil and South Africa. The reverse (UE) flow is around 50% per quarter and higher in Canada, Mexico and the US, but only 20% in France or Brazil and only around 10% in South Africa. These countries thus cover a very large part of the range of labor market outcomes across countries.

Preliminary estimates using the same number of types as Hall and Kudlyak (2022) show a dual labor market structure in all sample countries, with large variation in the proportion of types. The primary, stably employed type encompasses almost 80% of individuals in Canada, 60% in France, 50% in Mexico, and less than a third in South Africa. The secondary, frequently unemployed type accounts for only around 10% of individuals in Canada, around 20% in France and Mexico, and over 30% in South Africa.[3]

These differences in the proportions of types have large effects on aggregate stocks and flows. In a counterfactual analysis, we compute what aggregate stocks and flows in the other countries would be if they had the type composition of Canada (but country-specific type characteristics). Preliminary results from this analysis reveal that differences in the proportion of types account for 80% or more of differences in the mean unemployment rate. If France, Mexico and South Africa had the large share of primary types and low share of secondary types that Canada has, 80% of their gap in unemployment compared to Canada would be closed. The same holds for the non-participation rate.

Differences in the prevalence of types also matter for aggregate flows. Half the gap between the French or South African UE transition rate, compared to Canada, would be closed if these countries had the Canadian type distribution. Further, it turns out that Mexico and South Africa have much higher EU transition rates than Canada only because of type differences. If they had the Canadian type distribution, their EU rates would be lower than the Canadian counterpart. This reflects the fact that estimated EU rates conditional on type are mostly higher in Canada compared to the other countries.

We plan to further enrich the analysis by considering additional observed states, in particular self-employment, which is highly prevalent in poor countries and plays an important role in their greater level of churn (Gollin, 2007; Donovan et al., 2023; Poschke, 2023). This analysis will also reveal whether wage employment and self-employment are associated to different types. This is crucial for understanding high self-employment in poor countries and the ability of policy to affect it.

Our accounting analysis does not speak to the sources of differences in the prevalence of different types. The papers cited above all find that in the US, demographics are correlated with types but have very weak predictive power for types. We will investigate whether this is also the case elsewhere. It is plausible that very low levels of education or recent rural-urban migration and lack of urban labor market experience – characteristics that are rare in rich but much more common in poor countries – may predict type.

Our choice of countries makes our findings relevant both to the literature in the tradition of Ljungqvist and Sargent (1998) that compares labor markets across rich countries, in particular between the US and Europe, and to the literature on macro-development that is interested in differences in labor market dynamics and their consequences for incomes across countries (e.g. Engbom, 2022; Ma et al., 2023). Our estimates will also be an important input for the literature interested in heterogeneity in labor markets, and recent work on heterogeneity and the effectiveness of economic policies.

[3]Our findings for Canada are qualitatively and quantitatively very close to those for the US in the papers cited above. Analysis for the US and Brazil is in progress.

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