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Etapa 2010
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Disciplina Principal: Economía Laboral y de los Recursos Human
Grupo de Estudio: CS. Econom/Admi
Investigador(a) Responsable: Alexandre Janiaq
Dirección: Comuna:
Ciudad: Santiago
Región: Metropolitana

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INFORME FINAL
PROYECTO FONDECYT INICIACION

OBJETIVOS
Cumplimiento de los Objetivos planteados en la etapa final, o pendientes de cumplir. Recuerde que en esta sección debe referirse a objetivos desarrollados, NO listar actividades desarrolladas.

<table>
<thead>
<tr>
<th>Nº</th>
<th>OBJETIVOS</th>
<th>CUMPLIMIENTO</th>
<th>FUNDAMENTO</th>
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<tr>
<td>1</td>
<td>I will build a matching model of the labor market where competition on the goods market influence both the growth rate of the economy and worker flows. The model will be calibrated to the US economy to understand whether this link is strong enough so as to explain the Great Moderation.</td>
<td>PARCIAL</td>
<td>As I explained in previous report, I indeed built a matching model of the labor market where competition on the goods market influence worker flows. However, I chose not to interact the model with the rate of growth: I realized that there is not much work in the literature on matching models of the labor market with competition on the goods market. Hence, if I want to publish a paper on a matching model of the labor market that I could interact with goods market competition and growth at the same time, I first need to analyze the interaction with goods market imperfection alone. I decided to discard the analysis of growth of the project. Instead, I focus on how entry and exit costs for firms affect labor market flows and unemployment. I submitted to the Journal of Monetary Economics. Unfortunately it has been rejected. I included comments by the referees and the editor in a new version of the paper. The paper is currently under at Labour Economics.</td>
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<td>2</td>
<td>In particular, it aims at analyzing the recent evolution of the decrease in the job separation rate, the increase in job-to-job mobility, the decrease in the labor share, the increase in the cross-sectional volatility of earnings.</td>
<td>PARCIAL</td>
<td>The several papers related to the project have predictions in terms of job-to-job mobility, but results in terms of labor earnings have not been studied much yet. Two papers have been published, in the Journal of Urban Economics and the Journal of Money, Credit and Banking.</td>
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<td>3</td>
<td>The general goal is to understand the driving forces behind the recent evolution of labor-market variables and how they relate to the so-called Great Moderation.</td>
<td>TOTAL</td>
<td>The papers related to the project have deeply studied labor-market volatility. Two dimensions have been explored: the volatility of aggregate employment and the size of labor-market transitions (see the &quot;results&quot; section). However, there still remains work to be done on the specific issue of the Great Moderation.</td>
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Otro(s) aspecto(s) que Ud. considere importante(s) en la evaluación del cumplimiento de objetivos planteados en la propuesta
original o en las modificaciones autorizadas por los Consejos.
The project aims at studying labor-market volatility. In particular, by studying such aspects of the labor market, it then becomes possible to explain differences in the recent evolution of macro volatility across countries, the so-called Great Moderation.

Labor-market volatility is usually illustrated with two types of statistics:

i) size of labor-market flows (worker mobility between unemployment, employment and non-participation; job creation and destruction; firm creation and destruction).

ii) amplitude and persistence of labor-market stocks (employment, unemployment, participation)

Because of this statistical division, I present below the several papers I have been working on by considering those two broad categories.

The project also aims at analyzing jointly labor-market frictions with other macroeconomic aspects. In particular, it had been proposed goods market imperfections and growth. I have also been studying other interactions such as fiscal policy, credit frictions and social capital. Details on those other aspects are reported below.

Here is a listing of the several research papers, related to my Fondecyt project, that I have been working on during the last three years:

**Study of the size of labor-market flows**

Four on-going papers are on this theme. I now describe each of them.

**Structural unemployment and the costs of firm entry and exit**

As I already explained in last year’s report, I initially planned to study interactions between labor markets, goods market imperfections and growth in a matching model of the labor market. However, when I started to work on my Fondecyt project, I realized that little has been done in the literature on the interactions between labor markets and goods market imperfections in *matching models*. Indeed, the relevant references in the literature are Ebell and Haefke (RED, 2009) and Felbermayr and Prat (JEEA, 2010). Hence, if I want to publish a paper on a matching model of the labor market that I could interact with goods market competition and growth at the same time, I first need to analyze the interaction with goods market imperfection alone. For this reason, I decided to develop an analysis that only focused on goods market imperfections first. This analysis is done in a paper entitled “Structural unemployment and the costs of firm entry and exit”. This project appeared under other titles in previous years’ reports, such as “A large firm model of the labor market with entry, exit and search frictions” and “Structural unemployment and product market regulation”.

...
In this paper, I study how costs on firm entry and exit affect unemployment. In particular, two frictions are considered, i.e., the regulatory cost of establishing a new firm and regulations involving capital loss when firms exit. I ask to what extent a model involving such regulatory frictions is able to replicate the positive correlation between product market regulation indicators and unemployment that is observed across OECD countries. Specifically, I build a large-firm model of the labor market with search and matching frictions along the lines of Cahuc et al. (2008). I differ from their framework by allowing for entry and exit of firms. This allows me to study the effect of these regulations on steady-state unemployment. This analysis cannot be done in the standard matching model with one worker per firm because, by construction, vacancy costs are confounded with firm entry costs. By allowing for several workers per firm, I can separate the firm entry decision with the vacancy creation decision.

I calibrate the model to the US economy by using data on entry and exit regulation of the product market from the Doing Business database. I then follow standard practice in development accounting. I vary the parameters describing the stringency of product market regulation as they do vary in the data. This allows me to generate a sample of simulated OECD economies. Those economies differ from the benchmark calibrated economy only in the regulation of product market. I then compare the distribution of unemployment in those economies with the actual OECD distribution.

Several results come out of this quantitative analysis. First, regulation matters for unemployment. However, I show that only exit regulation is relevant, entry regulation plays no role: 32% of the cross-country variance in unemployment in the OECD is explained by exit regulation, while entry regulation generates almost zero variance. Furthermore, if I run an OLS regression of unemployment on my product market indicators with the simulated data and I compare the estimated slope with the slope of another OLS regression ran with the observed data, they are very similar in the case of exit regulation; however, the slope is almost zero in the case of entry regulation. Second, I ask what share of the unemployment gap between Continental Europe and the United States my model is able to generate. My results suggest that product market regulation is responsible for half the gap between the two continents, exit regulation being responsible for almost the entire explained gap. Finally, conclusions regarding the effects on output and capital accumulation are similar: exit regulation depresses both variables, but entry regulation does not affect them significantly.

During the third year of project, the paper has been presented at the Meeting of the European Economic Association in Oslo and in a workshop organized by the Sociedad de Politicas Publicas in Santiago. Moreover, a seminar has been given at USACH.

The paper has been rejected by the Journal of Monetary Economics. I included the comments by the editor and the referees in a new version of the paper (hence the new title). The new version is currently under review at Labour Economics. I attach an e-mail from the Journal confirming reception of the manuscript.

Inflation and welfare in long-run equilibrium with firm dynamics

As mentioned in last year project, we have produced this other paper with a co-author (Paulo Santos Monteiro), where we analyze how monetary policy can distort firm entry dynamics and the allocation of resources across firms that differ in productivity in a model with cash-in-advance constraints. When calibrating the model, we find that our effect that operates through the allocation of resources across firms can explain about half of the welfare cost of inflation.
Local social capital and geographical mobility

This paper is a project with two co-authors: Etienne Wasmer (Science Po Paris) and Quentin David (Luxembourg). It aims at studying worker mobility, in particular regional mobility, with local social capital, i.e. social capital that depreciates upon mobility. In this paper, we show in a model that mobility is reduced when the stock of social capital is increased and provide evidence from EU countries.

The paper has been published in the Journal of Urban Economics. Full credit to the research project no 11080251 is made in the published version of the paper. Acknowledgement to the research project are found on page 202.

Study of amplitude and persistence of labor-market stocks:

I only have one paper related to this theme: “Towards a quantitative theory of automatic stabilizers: the role of demographics”. Previous versions of this paper circulated under the titles “Labor force heterogeneity: implications for the relation between aggregate volatility and government size” and “Government size and macroeconomic stability in life-cycle economies”. The paper is co-authored with Paulo Santos Monteiro from the University of Warwick (United Kingdom).

In these papers, we analyze how labor markets interact with fiscal policy in a life-cycle model. The motivation is that no model in macroeconomics with appropriate microfoundations can explain automatic stabilizers, i.e. the negative correlation between output volatility and the share of taxes in output that is observed across countries. We document that countries with large share of taxes in output are characterized by lower labor market participation of young workers. Because employment for the young is more volatile (higher labor supply elasticity), we can explain a substantial share of the negative correlation between output volatility and the share of taxes in output. This mechanism is studied in life-cycle models and calibrated.

The paper has been rejected by the Journal of the European Economic Association. The referees appreciated the idea, but found the quantitative results weak. For this reason, we extended the model with adjustment costs of capital and variable capital utilization. This considerably improved the results. The new version of the paper has been submitted to the Journal of Monetary Economics.

Students

During those three years, seven students have worked with me: Varinia Tromben, Pablo Carvalho, Sergio Salgado, Eric Martinez, Gonzalo Iberti, Pablo Ruz and Santiago Justel. Sergio and Santiago have also been research assistants for the Fondecyt project. Three of them have defended their thesis: Sergio Salgado, Pablo Ruz and Santiago Justel.
Achievements

- Publications in the *Journal of Urban Economics* and the *Journal of Money, Credit and Banking* (see the “product” section)
- A series of working papers and mimeo (see the “results” section)
- Presentations at several conferences (see the “product” section)
- Seven students have been doing their thesis with me. Among those, two have been hired as research assistant for the project (see the “results” section)
The project studies labor-market volatility.

We interpret a situation characterized by large labor-market volatility either when the stocks of employment and unemployment display large fluctuations or when worker flows between employment and non employment are large. This project simply aims at explaining differences in volatility; it does not necessarily judge whether volatility is good or bad. Volatility may be good if it results from the ability of workers to cope with change. It may be bad if it suggests larger risk on the labor market.

We focus on several elements affecting volatility. We consider several policy instruments such as employment protection, labor taxes or even monetary growth. Non-policy channels are also included in the analysis, since they may interact with policy. For example, in a paper published in the *Journal of Urban Economics*, we study how investment in local social capital interact with labor market policy and labor mobility. We refer to “local social capital” as the process of developing stronger relationships with individuals that are geographically close such as family or friends. We develop a model in which caring about friends and relatives implies lower geographical mobility. In turn, this has an impact on labor-market volatility since mobility is lower and may affect the rate of unemployment. This process interacts with labor-market policy through mobility. An example is employment protection: if individuals anticipate staying in jobs when protection is high, mobility may also be reduced because local social capital gets larger.

Another example, published in the *Journal of Money, Credit and Banking*, is the interaction between money growth and labor reallocation. In this paper, we find that at higher inflation, firm creation is lower, which impedes relation of labor across firms, hence lower volatility. Moreover, this effect is amplified through a negative effect on productivity.
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<td>Autor (a)(es/as) :</td>
<td>Janiak, A.; Santos Monteiro, P.</td>
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<td>Nombre Completo de la Revista :</td>
<td>Journal of Money, Credit and Banking</td>
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<tr>
<td>Título (Idioma original) :</td>
<td>Inflation and Welfare in Long-Run Equilibrium with Firm Dynamics</td>
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| Archivo(s) Asociado(s) al artículo : | Janiak_SantosMonteiro_JMCB_2011.pdf |

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<td>David, Q.; Janiak, A.; Wasmer, E.</td>
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<tr>
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<td>Journal of Urban Economics</td>
</tr>
<tr>
<td>Título (Idioma original) :</td>
<td>Local social capital and geographical mobility</td>
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OTRAS PUBLICACIONES / PRODUCTOS

Sin información ingresada.

CONGRESOS

1

Autor (a)(es/as) : Janiak, A.
Título (Idioma original) : Structural unemployment and the costs of firm entry and exit
Nombre del Congreso : Meeting of the European Economic Association
País : NORUEGA
Ciudad : Oslo
Fecha Inicio : 25/08/2011
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Título (Idioma original) : Structural unemployment and the costs of firm entry and exit
Nombre del Congreso : Sociedad de Políticas Publicas
País : CHILE
Ciudad : Santiago
Fecha Inicio : 19/01/2011
Fecha Término : 19/01/2011
Nombre Publicación :
Año :
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Páginas :
Envía documento en papel : sí
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TESIS/MEMORIAS

1
Título de Tesis : Investment Dynamics in a DSGE Model with Heterogeneous Firms and Corporate Taxation
Nombre y Apellidos del(de la) Alumno(a) : Sergio Salgado Ibañez
Nombre y Apellidos del(de la) Tutor(a) : Alexandre Janiak
Título Grado : Magister
Institución : Universidad de Chile
País : CHILE
Ciudad : Santiago
Estado de Tesis : Terminada
Fecha Inicio : 01/03/2009
Fecha Término : 02/09/2011
Envía documento en papel : si
Archivo Asociado :

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Nº : 2
Título de Tesis : Inversión en Training Incorporando Career Concerns a los Agentes
Nombre y Apellidos del(de la) Alumno(a) : Pablo Ruz
Nombre y Apellidos del(de la) Tutor(a) : Alexandre Janiak
Título Grado : Magister
Institución : Universidad de Chile
País : CHILE
Ciudad : Santiago
Estado de Tesis : Terminada
Fecha Inicio : 01/03/2010
Fecha Término : 18/11/2011
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Nº : 3
Título de Tesis : EL ROL DEL GASTO DE GOBIERNO EN UN MODELO DE CICLO ECONOMICO REAL
Nombre y Apellidos del(de la) Alumno(a) : Santiago Justel Velasquez
Nombre y Apellidos del(de la) Tutor(a) : Alexandre Janiak
Título Grado : Magister
Institución : Universidad de Chile
País : CHILE
Ciudad : Santiago
Estado de Tesis : En Ejecución
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A continuación se detallan los anexos físicos/papel que no se incluyen en el informe en formato PDF.

I attach confirmation of two submissions at Journal of Monetary Economic and Labour Economics.