The Global Crisis and the Peruvian Labor Market: Impact and Policy Options

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Outline

- Motivation & objectives
- Stylized facts
- Alternative policy options
- DSGE model and results
- Wrap up
Motivation and objectives

- Peru does not have automatic macroeconomic stabilizers in its economy.
- In the labor market:
  - No widespread unemployment insurance
  - Public jobs are not crisis-contingent
  - Even the minimum wage does not have a crisis-led trigger.
- In which aspects of labor market reform can we move forward while we discuss how to withstand the crisis?
Motivation and objectives

What we want to do:

- Address the *impact* of the global financial crisis on the Peruvian labor market.
- Evaluate different *policy choices*.
- Their adequacy will depend on:
  - policy objectives
  - magnitude and duration of the external shock
  - the way the shock transpires into different sectors.
Motivation and objectives

- **How do we do it:**
  - Review stylized facts from this and previous crisis to account for potential transmission mechanisms and labor market outcomes.
  - Literature review to: (i) identify most relevant policy options; and (ii) assess the effects of past and existing interventions.
  - Quantitative exercise based on DSGE model to capture basic transmission mechanisms and compare the effects of transitory and permanent policy measures.
A drop in global demand → a terms of trade shock...the crisis hit our economy mainly through a commercial channel.
Stylized facts

Terms of trade shocks hit tradable sectors first... the manufacturing sector has taken the largest toll, followed by the extractive sector

Urban Employment; firms with 10 or more workers; annual growth rate

In the previous crisis (1998-2001), all five sectors experienced negative growth rates → the external shock triggered a domestic financial market crisis which affected aggregate investment and job creation rates throughout the economy.
During recessions, workers are more likely to move into underemployment than open unemployment.

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Alternative policy options

- But first...the objectives!
  1. *Reduce adequate employment loss*
  2. *Prevent real income loss in vulnerable groups (young, unskilled, women).*
  3. *Extend formal job benefits.*

- The first two closely related with the business cycle and, thus, will call for interventions of countercyclical nature.

- The third structural phenomena that explain why our labor market exhibits a large informal sector as an equilibrium outcome.
### Policy objectives and crisis scenarios

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<th>A. Short-to-medium lived recession</th>
<th>B. Protracted and widespread recession</th>
<th>3. Extend formal employment benefits</th>
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<td>Focused on tradable sector</td>
<td>Transpires into non-tradable sector</td>
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#### I. Active labor market policies

- **(i) Job protection:**
  - Temporary payroll tax holiday.
- **(ii) Worker protection:**
  - Strengthened and better focalized re-employment service (Revalora Peru).

#### II. Income support policies

- Strengthened demand-driven public works programs attracting low income-low opportunity cost workers (ATU-Construyendo Peru)

#### III. MILES framework

- **Macro policies**
  - Investment climate, institutions, infrastructure
- **Labor market institutions and regulations**
  - High formal labor costs
  - Promote progressive access to labor benefits for small and microenterprises and cut down firing costs
- **Education and skills**
  - Low productivity
  - Integrate and extend successful training and labor market information programs (Projoven – Propoli – RedCIL)
- **Social protection**
DSGE model and results

- Provide further insight regarding three key issues:
  1. The effects of the crisis on the evolution of aggregate GDP and formal employment;
  2. The countercyclical potential of selected policy interventions (with special emphasis on the distinction between transitory and permanent interventions);
  3. The potential effects of changes in labor regulation and productivity on the long run participation of the formal sector in terms of employment and output.
**Main features:**

- Three sector open economy model.
- Non-tradable sector: demands domestic capital and labor to produce goods consumed only in the local market.
- Tradable sector: demands labor and imported capital to produce goods consumed both in the domestic and foreign markets.
- Informal activity: has the lowest labor productivity and acts as a buffer for unemployed workers. Does not accumulate capital and its output is only for the domestic market.
Main features (cont.):

- Two key attributes: it is based on behavioral relationships and that it includes a stochastic component when modeling families’ decisions.

- Other modeling exercises based on reduced form relations can capture the stylized facts of the shock but...

- Our model can also tell a story about: (i) how does the long run allocation of resources respond to a new set of structural conditions; and (ii) what are the consequences (for policy) of dealing with agents that make decisions based on their expectations of the future.
DSGE model and results

- Main features (cont.):
  - **Limitation**: we have avoided the introduction of nominal rigidities or other market imperfections that could have an amplifying effect on the initial shock \(\rightarrow\) results that stem from our simulations should be understood as an upper boundary of the way our economy will react to the crisis in the absence of a fiscal expansion other than the specific labor market policy measures we model.
V shaped vs. L shaped

- Short-lived recession is triggered by a 20% drop in export prices in period 1 (year 2009).
- Prolonged recession scenario is also triggered by a 20% drop in export prices in the first period, accompanied by a further 10% drop in period 2 (year 2010).
Transitory vs. permanent labor tax cut

The permanent policy shock, not only delivers a larger growth in formal employment participation on impact but, more importantly, it delivers a long-run effect: the participation of formal employment grows by nearly 2 percentage points in the new steady state.

Despite having the same size in period 1, the permanent policy shock delivers a stronger countercyclical effect: aggregate GDP growth falls almost 2 percentage points less with respect to its equilibrium value.

- Labor tax is reduced by 20% in the first two periods and sustained for the permanent scenario.
- Transitory reduction → temporarily suppressing firms’ contribution to social security (public health).
- Permanent reduction → eliminating one of the two yearly bonuses.

- If the crisis is sustained additional short run benefits from the permanent intervention are more along the lines of a smaller fiscal burden → relying on tax cuts to offset the effects of the crisis under a prolonged recession becomes much more expensive.
Wrap up!

- Falling external demand for our exports has reduced real returns in the tradable sector.
- Job separations in extractive and manufacturing activities with a strong tradable component imply that employment loss is concentrated in formal jobs which, in turn, can be largely classified as adequate.
- A surge in informality and underemployment is the main risk that the policymaker should aim to mitigate through the cycle.
Wrap up!

- Formal job separations can be reduced if the burden of keeping the job is shared with the government. Simulations → temporary payroll tax holidays have a countercyclical potential.

- But fiscal costs can be particularly high, especially if the world economy takes more time to recover → further temporary but generalized exonerations will be difficult to implement.

- Need to resort to additional measures that can still have an impact on the second year of the crisis, with a more focalized nature: retraining and temporary public works programs.
Wrap up!

- On the more structural side: simulations → permanent non-wage labor cost reductions can increase formal employment and formal GDP by 2 percentage points.
- Policies were modeled as halving bonuses or vacations in a way similar to that already implemented in the special labor regime for small and micro enterprises.
- Special regime → progressive access to labor benefits for low productivity firms. Can be complemented by introducing minimum wage levels according to firm size for new contracts, and a generalized reduction in firing costs.
Wrap up!

- Formal employment participation can rise 0.5 percentage points for every 3% increase in total factor productivity.
- No silver bullet to accomplish this → promising experiences that can be strengthened and integrated into a single intervention package: Projoven, Propoli and Red CIL.
- Simulations → stronger case for policy interventions that stem from a structural reform agenda and imply that we should not wait for the crisis to be over to start their implementation.
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