Japan’s Labor Market Challenges

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IMF Regional Office for Asia and the Pacific
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Overview

- Boosting the labor force
- Labor market duality and productivity
- Labor market duality and wage-price dynamics
Boosting the Labor Force
Population and labor force are shrinking

**Population Growth Rate**
(In percent)

- Population aged 15-64
- Population aged >65


**Actual and Trend Labor Force**
(In million)

Demographics will weigh heavily on potential growth

**Potential Growth**
(In percent)

Source: IMF staff calculation.
Employers are facing the worst labor shortage in 20+ years

Bank of Japan Tankan Survey
Employment Condition by Industry Type
(D.I.; “excess” minus “shortage”)

Nationwide Job-to-Applicant Ratio

Source: Bank of Japan
Source: Ministry of Health Labour and Welfare.
Note: 2015 data is Jan-Oct average
But there are signs that there might still be some slack in the labor market.

Average Annual Hours Actually Worked per Worker (Hours)

Source: OECD.
Note: Germany is represented by West Germany until 1990.

Reason for Working as a Non-Regular Employee, 2014

Source: Ministry of Internal Affairs and Communication.
Policy options to address labor shortages

- Increase labor inputs through supporting the shift from part-time to full-time
- Boost female labor force
  - Raise female labor participation rate
  - Abolish tax wedge and social security disincentives
  - Terminate spouse allowance payment
- Increase take-home pay
  - Support wage increase
  - Lower social security premiums subject to fiscal space
- Foster continuing attachment of older workers
  - Raise pensionable age
  - Reduce over-generous benefits
- Increase the supply of foreign labor
Female participation has been rising

Female Labor Participation Rate
(In percent)

Older Worker Group Employment Rate
(In percent; 55-64 year-olds)

Source: OECD
Older workers’ participation is relatively high

**Older Worker Group Employment Rate**
(In percent, age 55-64)

Source: OECD.
Percentage of foreign workers in Japan is the lowest among OECD countries

Source: OECD “International Migration Outlook 2010”
Labor Market Duality and Productivity
Labor market duality is deepening

**Ratio of Non-Regular Workers** (In percent)

<table>
<thead>
<tr>
<th>Year</th>
<th>Regular - male</th>
<th>Regular - female</th>
<th>Non-regular - male</th>
<th>Non-regular - female</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>31.4</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2006</td>
<td>32.6</td>
<td></td>
<td></td>
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<tr>
<td>2008</td>
<td>33.5</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2010</td>
<td>34.1</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>2012</td>
<td>34.4</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>36.7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Ministry of Internal Affairs and Communication.

**Number of Employees by Employment Type** (In million)

- Regular - male: Red line
- Regular - female: Yellow line
- Non-regular - male: Blue line
- Non-regular - female: Brown line

Source: Ministry of Internal Affairs and Communication.
Female labor participation is skewed toward non-regular contracts

Female Representation by Employment Format (In percent)

Source: Ministry of Internal Affairs and Communication
Labor market duality has reduced investment in human capital

- Labor market duality reduces training opportunities for non-regular workers
  - Only 42 percent of companies provided training for non-regular workers, whereas 92 percent of companies provided training for regular workers (Kawaguchi and others, 2006)
  - Workers productivity improves 5 percent per year if a worker receives training
  - Additional 5 hours of training will allow the worker to take up one additional operational task (Ariga and others, 2013)

Source: Ministry of Internal Affairs and Communication
Contract reform to reduce duality would boost efficiency through higher productivity

- Excessive Duality can reduce Total Factor Productivity (TFP) through various channels (e.g. training, motivation)
  - 20 percent of the productivity slowdown in Spanish manufacturing (1992-2005) is attributed to reliance on temporary work (Dolado and others 2011)
  - Deregulation of temporary contracts negatively influences TFP growth in a panel of 14 EU countries (Damiani and others 2011)
Labor market duality has also suppressed wage growth...

Nonregular Workers and Wage Growth
(year-on-year percent change) (% of staff)

Real wage and productivity growth
(In percent, 1992-2014)

Sources: Haver Analytics; and IMF staff estimates.
1/ Yearly Average.

Sources: OECD, and IMF staff calculations.
...notwithstanding labor shortages

**Changes in Employment Conditions and Wages Growth 1/**
(2010Q4-2015Q3)

Source: Haver Analytics.
1/ Diffusion index. More negative indicates more tightening.

**Wage Growth**
(In percent, YoY)

Source: Ministry of Health, Labor and Welfare
Findings from Porcellacchia (2015)

• **If**
  1. the economy is in the **liquidity trap** and
  2. workers’ bargaining **power** deteriorates

• **then**
  1. **prices decrease** regardless of monetary policy and
  2. **real wages decline** below productivity.

• **If**
  1. The decrease in workers’ bargaining power is large,
  2. The **inflation target** is low,
  3. The economy’s **discount rate** is low (due to population aging or a deleveraging shock)

• **then**
  the economy is more likely to fall in the liquidity trap.
The Labor Market Policy Trade-Off: Reflation vs. Employment

- In the liquidity trap, it is possible to reflate the economy by increasing workers’ bargaining power with a labor-market reform (in Japan’s case, by reducing labor-market duality).

- However, the benefits of reflation must be weighted against the downside of a reduction in employment.

- This is an unusual trade-off: an inverted Phillips curve relation.

Porcellacchia (2015) is the first to make a clear theoretical case that structural reforms can be inflationary in the short term in certain countries (i.e., Japan).

- A labor market reform should be accompanied by corporate governance reforms to strengthen the incentives for firms to pass on the higher costs (from higher wages) into prices.
Policy options to raise wages

- Raise **public** and **minimum wages**
- Provide/further strengthen **tax incentives** for employers that rose wages
- Increase the frequency of the **wage rounds**
- Apply “**comply or explain**” **rules** for wage hike, backed up by penalties if needed
- Reduce labor market **duality**
- Reform **labor contracts** and laws to balance job security and job flexibility
Thank you