The Path to Higher Growth: Does Revamping Japan’s Dual Labor Market Matter?

Presentation by
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Motivations:

-- Japan’s labor market duality—a two-tier labor market with “regular” and “non-regular” workers—increased dramatically in recent years.

-- Microeconomic and cross-country studies suggest that excessive duality can reduce TFP and growth (training and effort channels).

-- Need to consider this in the context of structural reforms (Japan’s growth strategy, or “third arrows” of Abenomics): how can duality be reduced?
Methodology and main findings:

-- Cross-country (OECD) panel regression in which a proxy of labor market duality is regressed on economic, institutional, and demographic determinants

-- Reducing difference in level of employment protection between regular and non-regular workers can be effective in reducing duality

-- Policy implications
Japan’s Dual Labor Market: Some Stylized Facts

Annual Change
(Thousand Persons)

Source: Ministry of Internal Affairs and Communications, IMF staff calculations.
Japan’s Dual Labor Market: Some Stylized Facts

Number of Non-regular Workers
(Thousand persons, 2007)

Sources: Ministry of Internal Affairs and Communications, IMF staff calculations.
Japan’s Dual Labor Market: Some Stylized Facts

**Share of Non-regular Workers Among Female Employees (2007)**

- **Total**
- **Non Married**

Sources: Ministry of Internal Affairs and Communications, IMF staff calculations.
Japan’s Dual Labor Market: Some Stylized Facts

Share of Temporary Workers (2011)

(\%) 

Spain, Korea, Netherlands, Sweden, Finland, France, Germany, Japan, Canada, Italy, Switzerland, U.K. 

Sources: OECD.
Costs and benefits of duality

Benefits:

-- Bring new “voluntary non-regular” workers into labor force (satisfy demand for flexible work arrangements)

-- Contribute to keep overall unemployment low

Costs:

-- Reduced TFP and growth through training and effort channels

-- Perception that growth is not inclusive can reduce support for needed structural reforms

Costs likely to dominate in Japan
Japan: Labor Market Duality and Productivity by Economic Sector

*Productivity is measured by amount of value-added divided by number of workers.
Source: Mizuho Research Institute, Ministry of Internal Affairs and Communications; IMF staff calculations.
Determinants of duality: panel data estimation on 17 OECD countries (annual data; 1985-2010)

Model specification:

\[
TS_{it} = \alpha_1 TS(-1)_{it} + \alpha_2 EPR_{it} + \alpha_3 EPT_{it} + \alpha_4 FDIOU_{it} + \alpha_5 FLP_{it} + \alpha_6 SERVEMPL_{it} + \alpha_7 UD_{it} + \alpha_8 UN_{it} + \alpha_9 INFFL_{it} + \alpha_{10} OG_{it} + \alpha_{11} SPENDTR_{it} + \gamma_i + u_{it}
\]
### Table 1. Japan: Determinants of Labor Market Duality in a Panel of OECD Countries: Regression Results 1/  

<table>
<thead>
<tr>
<th>Dependent Variable: Share of Temporary Workers</th>
<th>Benchmark model 2/</th>
<th>Benchmark model 3/</th>
<th>Benchmark model 4/</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment Protection Legislation of Regular Workers</td>
<td>0.763</td>
<td>0.763</td>
<td>0.768</td>
</tr>
<tr>
<td></td>
<td>[2.23]**</td>
<td>[2.8]**</td>
<td>[2.38]**</td>
</tr>
<tr>
<td>Employment Protection Legislation of Temporary Workers</td>
<td>-0.281</td>
<td>-0.281</td>
<td>-0.251</td>
</tr>
<tr>
<td></td>
<td>[-2.47]**</td>
<td>[-3.05]**</td>
<td>[-2.18]**</td>
</tr>
<tr>
<td>FDI Outflows (percent of GDP)</td>
<td>0.010</td>
<td>0.010</td>
<td>0.010</td>
</tr>
<tr>
<td></td>
<td>[0.72]</td>
<td>[1.21]</td>
<td>[0.85]</td>
</tr>
<tr>
<td>Female Labor Participation</td>
<td>0.094</td>
<td>0.094</td>
<td>0.105</td>
</tr>
<tr>
<td></td>
<td>[3.10]***</td>
<td>[2.33]**</td>
<td>[3.33]***</td>
</tr>
<tr>
<td>Share of Employment in Services</td>
<td>-0.192</td>
<td>-0.192</td>
<td>-0.193</td>
</tr>
<tr>
<td></td>
<td>[-5.51]**</td>
<td>[-2.04]*</td>
<td>[-6.00]**</td>
</tr>
<tr>
<td>Union Density</td>
<td>-0.096</td>
<td>-0.096</td>
<td>-0.096</td>
</tr>
<tr>
<td></td>
<td>[-2.86]**</td>
<td>[-1.86]*</td>
<td>[-2.96]**</td>
</tr>
<tr>
<td>Unemployment Rate</td>
<td>0.110</td>
<td>0.110</td>
<td>0.115</td>
</tr>
<tr>
<td></td>
<td>[2.81]***</td>
<td>[1.68]</td>
<td>[3.17]***</td>
</tr>
<tr>
<td>Inflation</td>
<td>-0.230</td>
<td>-0.230</td>
<td>-0.215</td>
</tr>
<tr>
<td></td>
<td>[-5.19]**</td>
<td>[-2.45]**</td>
<td>[-5.19]***</td>
</tr>
<tr>
<td>Output Gap</td>
<td>0.006</td>
<td>0.006</td>
<td>0.005</td>
</tr>
<tr>
<td></td>
<td>[0.16]</td>
<td>[0.12]</td>
<td>[0.15]</td>
</tr>
<tr>
<td>Government Spending on Vocational Training (percent of GDP)</td>
<td>-0.469</td>
<td>-0.469</td>
<td>-0.671</td>
</tr>
<tr>
<td></td>
<td>[-0.82]</td>
<td>[-0.97]</td>
<td>[-1.18]</td>
</tr>
<tr>
<td>Lagged Dependent Variable</td>
<td>0.825</td>
<td>0.825</td>
<td>0.823</td>
</tr>
<tr>
<td></td>
<td>[26.5]**</td>
<td>[40.58]**</td>
<td>[26.45]**</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.857</td>
<td>0.857</td>
<td>...</td>
</tr>
</tbody>
</table>

Source: IMF Staff Calculations  
1/ T-statistics are reported in parenthesis. * denotes significance at 10% level, ** significance at 5% level, and *** significance at 1 percent level. Countries included in the panel are Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and United Kingdom. Annual data for 1985–2010 (or less, depending on availability). A Hausman test rejected the null hypothesis that a random effects model would be statistically different from a fixed effects one.

2/ Fixed effects estimation with default standard errors.
3/ Fixed effects estimation with clustered standard errors.
4/ Arellano-Bond estimation with one lag.
Determinants of duality: panel data estimation on 17 OECD countries (annual data; 1985-2010)

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➢ This result is robust to various specifications and estimation techniques
Policy implications:

-- Reducing the difference in the degree of employment protection between regular and non-regular workers can reduce duality

-- Estimated impact for Japan (first round effects only) could bring duality close or below 30%
### Policy implications:

#### Estimated Impact of Changes in EPT and EPR on Share on Regular Workers

<table>
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<tr>
<th>Share of non-regular workers in Japan in 2012 (EPR=1.9; EPT=1)</th>
<th>Share if: EPR from 1.9 to 1.5; EPT from 1 to 1.5</th>
<th>Share if: EPR from 1.9 to 1.6 (Denmark’s level); EPT unchanged at 1</th>
<th>Share if: EPR from 1.9 to 1.1 (UK’s level); EPT unchanged</th>
<th>Share if: EPR from 1.9 to 1; EPT unchanged at 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>35.1</td>
<td>30.4</td>
<td>31.3</td>
<td>29.8</td>
</tr>
</tbody>
</table>

Source: IMF staff calculations.
Policy implications:

-- If, as expected, the reduction in labor market duality results in higher growth, this would reduce unemployment and help exiting deflation

-- According to the econometric results presented in the study, a fall in unemployment and an increase in inflation would result in second round effects of the initial reform, which would further reduce duality
Policy implications:

-- One way to implement the policy recommendation given in this paper could be by offering all new hires a Single Open Ended Contract (SOEC)

-- Under a SOEC, employment protection and severance pay increases with tenure: less employment protection compared to current regular workers; more protection compared to current non-regulars

-- A wider use of “limited regular” ("gentei seishain") contracts is consistent with these recommendations
Complementary reforms also needed:

-- A shift towards “flexicurity”

-- Policies to increase wages

-- Changing “soft institutions”
A shift towards “flexicurity”: increasing unemployment insurance benefits; strengthening job matching and training programs for the unemployed.
Policies to increase wages

Source: OECD.
Policies to increase wages, possible options:

-- Moral suasion
-- Social concertation
-- Tax incentives
-- Minimum wage hike
Policies to increase wages

Minimum Wages Relative to Median Wages of Full-Time Workers

Turkey > France > New Zealand > Slovenia > Latvia > Portugal > Australia > Greece > Belgium > Hungary > Lithuania > Romania > Ireland > Netherlands > United Kingdom > Slovak Republic > Canada > Poland > Spain > Luxembourg > Korea > Estonia > Japan > United States > Czech Republic

Source: OECD.
A change in “soft institutions”
In summary

-- Economic costs of labor duality are likely to be high in Japan

-- Our analysis suggests that reducing differences in employment protection between regular and non-regular workers would reduce duality, thus raising potential growth

-- Complementary reforms will also be needed
Thank you for your attention