Development Progeria: Deconstructing the Decline of Manufacturing

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**Progeria**

Progeria is a genetic malfunction where children, 3 years of age, display the physical features of a person of 60.
Development Progeria: What?

• A Low Income Economy exhibits the Industrial Sector share dynamics of High Income Mature Economies.

• Service sector share rises; the Industry and Manufacturing sector shares fall;

• Results: Slow Growth: low investment rate, slow job creation, slow poverty reduction.
Let M, I, S be the Share of Manufacturing, Industry, Services, respectively, in Total Value Added in a Low Income Developing Country. Development Progeria exists if within a given period:

\[
\frac{\Delta M}{M}, \frac{\Delta I}{I} < 0; \\
\frac{\Delta S}{S} > 0
\]
Figure 1. Trajectory of Philippine Value-Added by Industry as % Shares of GDP, 1986-2009.

Data Source: World Bank World Dev. Indicators
Figure 2. Per Capita Income (US$), 1991 and 2002

Data Source: World Bank World Dev. Indicators
Figure 3. Change in % Industry Shares 1986 to 1996

Data Source: World Bank World Dev. Indicators
Figure 4. Change in % Industry Shares 1996 to 2009

Data Source: World Bank World Dev. Indicators
Figure 5. Change in Employment Share of Industry, 2000-2010

Data Source: World Bank World Dev. Indicators
Figure 6. Development Progeria in Latin America, 1990-2010
Genesis of Development Progeria

- **Strong Peso**: erodes the competitiveness of Tradables: including Agriculture (ginger and garlic), BPO

- **Weak Institutions**: drive investment from Manufacturing (Tradables) to Services (Non-Traded) Sectors (Rodrik, 2008).

- **Emergence of low cost manufacturing countries**: PRC, India, Bangla-Desh
Implications of Dev Progeria

• Slow long-term per capita income growth
• Low Investment Rate
• Slow job creation
• Slow poverty reduction
- Cross-country panel regression: Manufacturing and Service Shares in Value Added against Gross Fixed Capital Formation (GDCF % of GDP), Per Capita Income Growth and Poverty Incidence (WB WDI, 1991-2010).
- First pass regs, no contortions: all countries
## Gross fixed capital formation/GDP

**Linear regression**

Number of obs =  341  
F(  4,   336) =  16.61  
Prob > F =  0.0000  
R-squared =  0.2403  
Root MSE =  6.6533

|        | Coef.  | Robust Std. Err. |  t   |  P>|t|  | [95% Conf. Interval] |
|--------|--------|------------------|------|------|---------------------|
| gfcf   |        |                  |      |      |                     |
| Manuf_ValAd | .1964515 | .0724038 | 2.71 | 0.007 | .0540297 .3388733 |
| Serv_ValAd | -.0926667 | .0396427 | -2.34 | 0.020 | -.1706457 -.0146876 |
| bus_reg  | 5.10428 | .7257701 | 7.03 | 0.000 | 3.676654 6.531906 |
| gni      | .00048 | .0002068 | 2.32 | 0.021 | .0000732 .0008868 |
| _cons    | 6.10532 | 2.293073 | 2.66 | 0.008 | 1.594732 10.61591 |
## Per Capita Income Growth

### Linear regression

| percap_gr     | Coef.  | Robust Std. Err. | t   | P>|t|  | [95% Conf. Interval] |
|---------------|--------|------------------|-----|------|---------------------|
| Ind_ValAdded  | 0.0739234 | 0.0316961          | 2.33 | 0.020 | 0.0116001 - 0.1362468 |
| Serv_ValAd~d  | -0.0842433 | 0.0257391         | -3.27 | 0.001 | -0.1348535 - -0.0336332 |
| bus_reg       | 1.866647   | 0.4936803          | 3.78 | 0.000 | 0.8959348 - 2.837359  |
| gni           | -0.0002222 | 0.0001764          | -1.26 | 0.209 | -0.0005691 - 0.0001247 |
| _cons         | 1.160171   | 1.68464            | 0.69 | 0.491 | -2.152297 - 4.472639  |

Number of obs = 382
F( 4, 377) = 9.72
Prob > F = 0.0000
R-squared = 0.1449
Root MSE = 4.8725
### Poverty Incidence Growth

**Linear regression**

|       | Coef.     | Std. Err. | t     | P>|t|   | [95% Conf. Interval] |
|-------|-----------|-----------|-------|-------|----------------------|
| **ln_pov_line** |           |           |       |       |                      |
| Manuf_ValA~d   | -.0223079 | .0083481  | -2.67 | 0.009 | -.0389455 to -.0056702 |
| Serv_ValAd~d   | .0060031  | .0049957  | 1.20  | 0.233 | -.0039534 to .0159595 |
| bus_reg        | -.1287399 | .0959396  | -1.34 | 0.184 | -.3199473 to .0624676 |
| gni            | -.0002224 | .0000651  | -3.42 | 0.001 | -.0003521 to -.0000926 |
| _cons          | 4.343727  | .282763   | 15.36 | 0.000 | 3.780181 to 4.907273  |

**Number of obs = 78**

\( F(4, 73) = 7.57 \)

**Prob > F = 0.0000**

**R-squared = 0.2635**

**Root MSE = 0.44089**
Gross fixed capital formation/GDP

Linear regression

Number of obs = 341
F( 3, 337) = 25.16
Prob > F = 0.0000
R-squared = 0.2476
Root MSE = 6.6113

| gfcf | Coef.   | Robust Std. Err. | t     | P>|t|  | [95% Conf. Interval] |
|------|---------|------------------|-------|------|----------------------|
| ms_ratio | 11.56594 | 2.954835         | 3.91  | 0.000 | 5.7537               |
| bus_reg  | 4.723915  | 0.6580875        | 7.18  | 0.000 | 3.429438             |
| gni     | 0.0003402 | 0.0001646        | 2.07  | 0.040 | 0.000164             |
| _cons   | 2.584375  | 2.35502          | 1.10  | 0.273 | -2.048016            |
Since 2013

- Credo: DP is curable!
- What has happened since 2010?
Green Shoots in the Industry Front

<table>
<thead>
<tr>
<th>Growth Rates</th>
<th>Industry</th>
<th>Manufacturing</th>
<th>Services</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sem. 1 2013</td>
<td>Sem. 2 2013</td>
<td>Sem. 1 2014</td>
</tr>
<tr>
<td>Industry</td>
<td>10.9</td>
<td>7.7</td>
<td>6.6</td>
</tr>
<tr>
<td>Manuf.</td>
<td>9.9</td>
<td>10.6</td>
<td>8.8</td>
</tr>
<tr>
<td>Services</td>
<td>7.2</td>
<td>7.2</td>
<td>6.4</td>
</tr>
</tbody>
</table>

- Manufacturing grew faster than Services in past three semesters
## Still the Playground of Speculators?

### Ratio of Portfolio to Direct Foreign Investment (2013)

<table>
<thead>
<tr>
<th>Region</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>7.0</td>
</tr>
<tr>
<td>Emerging Markets Asia</td>
<td>19.0</td>
</tr>
<tr>
<td>Latin America</td>
<td>27.0</td>
</tr>
<tr>
<td>EM Europe</td>
<td>7.0</td>
</tr>
<tr>
<td>Africa and Middle East</td>
<td>27.0</td>
</tr>
<tr>
<td>Philippines</td>
<td>127.0</td>
</tr>
</tbody>
</table>

**Proportion of portfolio to direct foreign investment**

= 127 vs. 19% in EM Asia
Remedies

• Competitive Exchange Rate: as China
• Raise Gov’t Capital Outlay to 5% of GDP
• Celebrate Investment by:
  ❖ Simplifying regulations as in Mining
  ❖ Reducing electricity prices by procuring new baseload power plants
  ❖ Allow efficiencies such as in agriculture
  ❖ Broaden the tax base and reduce taxes. Go for uniform income tax
Reasons for Hope

• The new BSP dispensation more pragmatic
• Wider agreement on policy goal but not yet on instruments
• New PHL economy (BOP surplus; high GIR) means we can say “no” to purveyors of portfolio capital
• Wider acceptance of the mantra: “A weak peso leads to a strong economy.”
Thank You

Mabuhay Kayo!!!!!!
Danger Points

- High power cost/Power rate spike
  - Dangerously low power reserve
- Still a Consumption-led recovery
- Not yet an Investment-led growth!
- Boom-Bust Cycle as long-term legacy: cannot sustain rapid growth
Stubborn Legacies

- **Portfolio Investment** dominates Foreign Investment: $3.7b versus $1.5b DFI in 2012 the old familiar pattern
- **Investment Rate** = Gross Fixed Capital Investment/GDP is low: 19% of GDP despite higher Savings rate: 25%
- **Jobless growth**
  - Unemployment rate remains stubbornly high
In the Service of the Strong Peso: Junctures

• 1985 and the Interest Rate Cure through JOBO Bills: shrunk the economy to fit the overvalued peso! Neutered the Cory recovery.

• 1995 and “Over my dead body!”: The BSP embraced peso appreciation and told Banks to borrow abroad; bust effectively neutered the Ramos recovery.

• 2013 Upgrades: Will the PNoy recovery be neutered by peso appreciation?
The Lime Factory Parable

- Geo-7: a group of entrepreneurial scientists raised money to invest in lime production in Bohol in mid-1990,
- Decided to postpone and instead put capital in bubbly stock market; made quick abnormal paper profits; savvy!
- 1998: collapse of the bubble: lost capital
- Lime factory ditched: 10 jobs aborted.
- Why is the decline of M bad?
### Per Capita Income Growth

#### Linear Regression

| Variable  | Coef.     | Std. Err. | t     | P>|t|   | 95% Conf. Interval   |
|-----------|-----------|-----------|-------|--------|-----------------------|
| percap_gr | 3.485669  | 1.756061  | 1.98  | 0.048  | 0.0322432 – 6.939095  |
| ms_ratio  | 0.9940051 | 0.5191653 | 1.91  | 0.056  | -0.0269727 – 2.014983 |
| bus_reg   | -0.0003939| 0.000154  | -2.56 | 0.011  | -0.0006967 – -0.0000911|
| gni       | 1.575998  | 1.871758  | 0.84  | 0.400  | -2.104955 – 5.256952  |

Number of obs = 364
F( 3, 360) = 4.22
Prob > F = 0.0060
R-squared = 0.0371
Root MSE = 5.2717
### Linear regression

| ln_pov_line  | Coef.  | Robust Std. Err. | t    | P>|t|   | [95% Conf. Interval] |
|--------------|--------|------------------|------|-------|----------------------|
| ms_ratio     | -1.085194 | .3443456         | -3.15 | 0.002 | -1.771318 to -0.390707 |
| bus_reg      | -0.1189202 | .0794699        | -1.50 | 0.139 | -0.2772675 to 0.0394271 |
| gni          | -0.0002218 | .0000675        | -3.29 | 0.002 | -0.0003563 to -0.0000873 |
| _cons        | 4.606428   | .3009403         | 15.31 | 0.000 | 4.006791 to 5.206064   |

Number of obs = 78
F( 3, 74) = 10.59
Prob > F  = 0.0000
R-squared  = 0.2891
Root MSE   = 0.43023
First Pass Results

• Manufacturing Share positive/significant for investment rate and for per capita income growth; negative/significant for poverty reduction; by contrast,

• Service Sector Share negative/significant for investment rate, income growth and poverty incidence;

• Manuf/Service Sector Share positive/significant for the Investment Rate, per capita income growth.
Progeriacs and Jobless Growth

- Service Sector dominated by informal firms with low scale-up potential,
- Employment in the Service Sector: mostly low income, distress-coping, unstable
- GDP growth from asset price bubbles (PSEI 40% growth) create few jobs but lucky asset holders can afford caviar and Ferraris
- We must give Manufacturing and Tradables sectors breathing space.
Maraming Salamat at Mabuhay Kayo