

# **Growth Pattern and its Sustainability: China Towards 2020**

FAN Gang

National Economic Research Institute  
China Reform Foundation

## Growth accounting: input-driven and TFP (annual growth rate, %)

	Pre-reform period	Reform period		
	1953-78	1979-88	1989-98	1999-07
Aggregate				
<b>GDP growth rate – real</b>	<b>6.15</b>	<b>10.06</b>	<b>9.59</b>	<b>9.72</b>
<b>GDP growth rate – fitted</b>	<b>6.36</b>	<b>10.03</b>	<b>9.48</b>	<b>9.62</b>
Error	0.21	-0.03	-0.10	-0.10
Aggregate by sources				
<b>Inputs-driven</b>	<b>4.46</b>	<b>7.18</b>	<b>5.54</b>	<b>5.78</b>
Capital	2.66	2.76	2.94	3.80
Human capital	1.71	4.18	2.46	1.82
<b>TFP growth</b>	<b>1.81</b>	<b>2.66</b>	<b>3.74</b>	<b>3.63</b>
Spillover effect of human capital	0.32	1.49	0.79	1.09
R&D expenses	0.10	-0.16	0.15	0.31
Marketization	-0.55	0.82	0.55	0.67
Urbanization	0.06	0.24	0.23	0.38
Foreign capital effect	0.00	0.51	0.69	-0.55
Trade effect	0.00	0.11	0.04	0.27
Infrastructure effect	0.57	-0.04	1.02	2.57
Government administration cost	0.44	-0.18	-0.15	-1.66
Final consumption ratio	0.85	-0.16	0.36	0.49

### Growth forecasts: different scenarios (annual growth rate, %)

	1999-07(real)	2008-2020 (I)	2008-2020 (II)
<b>GDP growth rate</b>	<b>9.72</b>	<b>6.70</b>	<b>9.34</b>
<b>Input-driven growth</b>	<b>5.78</b>	<b>4.82</b>	<b>5.18</b>
<b>TFP growth</b>	<b>3.63</b>	<b>1.79</b>	<b>3.95</b>
Contribution by factor			
Capital	3.80	3.67	3.67
Human capital	1.82	1.04	1.39
Spillover effect of human capital	1.09	0.82	1.23
Research capital	0.31	0.32	0.32
Marketization	0.67	0.30	0.30
Urbanization	0.38	0.27	0.27
Foreign capital effect	-0.55	-0.16	-0.16
Trade effect	0.27	-0.05	-0.05
Infrastructure effect	2.57	1.98	1.98
Government administration cost	-1.66	-1.45	0.00
Final consumption ratio	0.49	-0.25	0.00

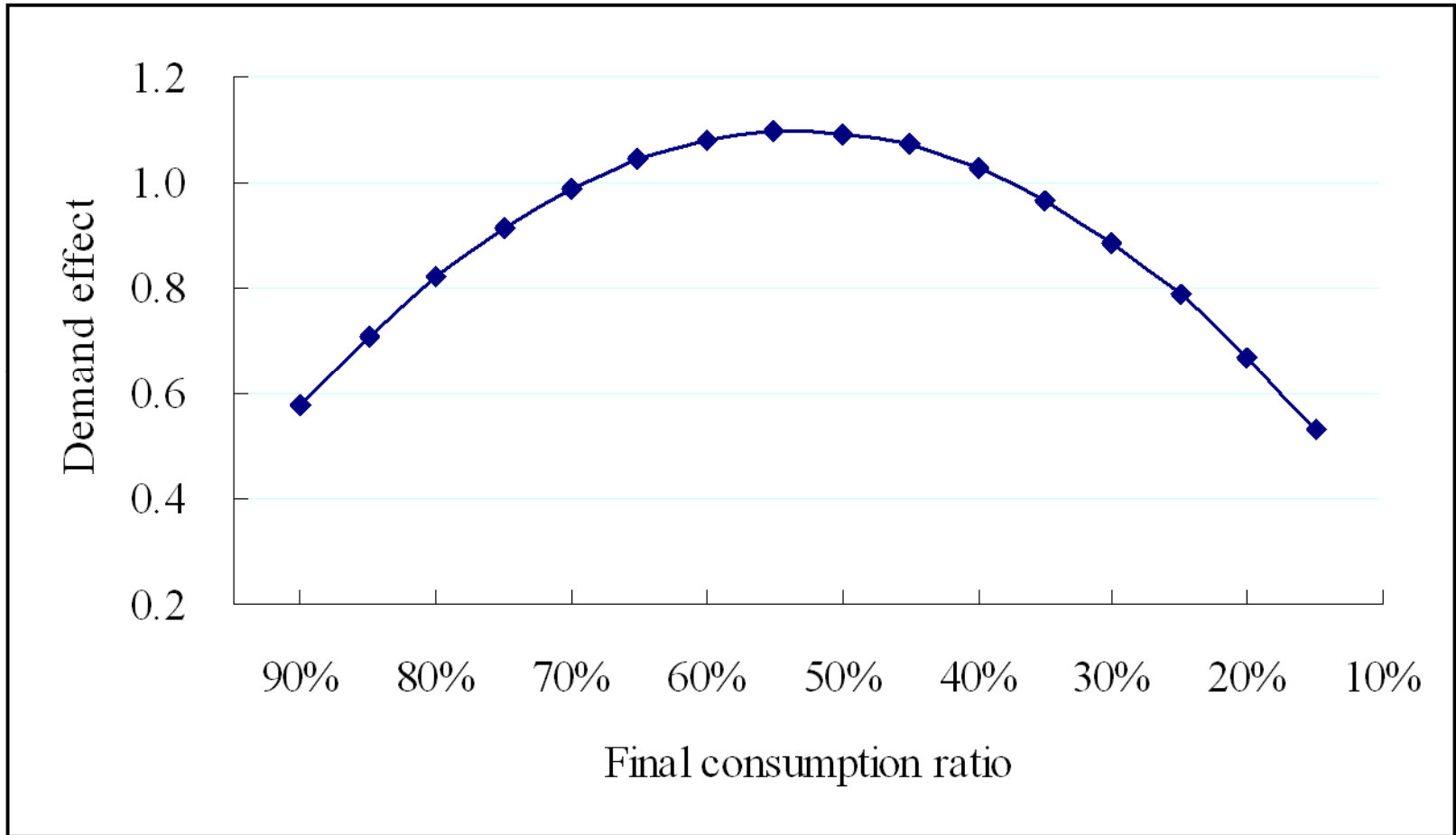
# Assumption for different Scenarios

- Scenarios I: Business as usual.
- Scenarios II: 3 assumptions:
  - Government costs to stop increasing and even lower;
  - Consumption would increase up to 55% of GDP in 2020;
  - And the education would be improved with the completion of enforcement of 9-year compulsory program.

# All other factors

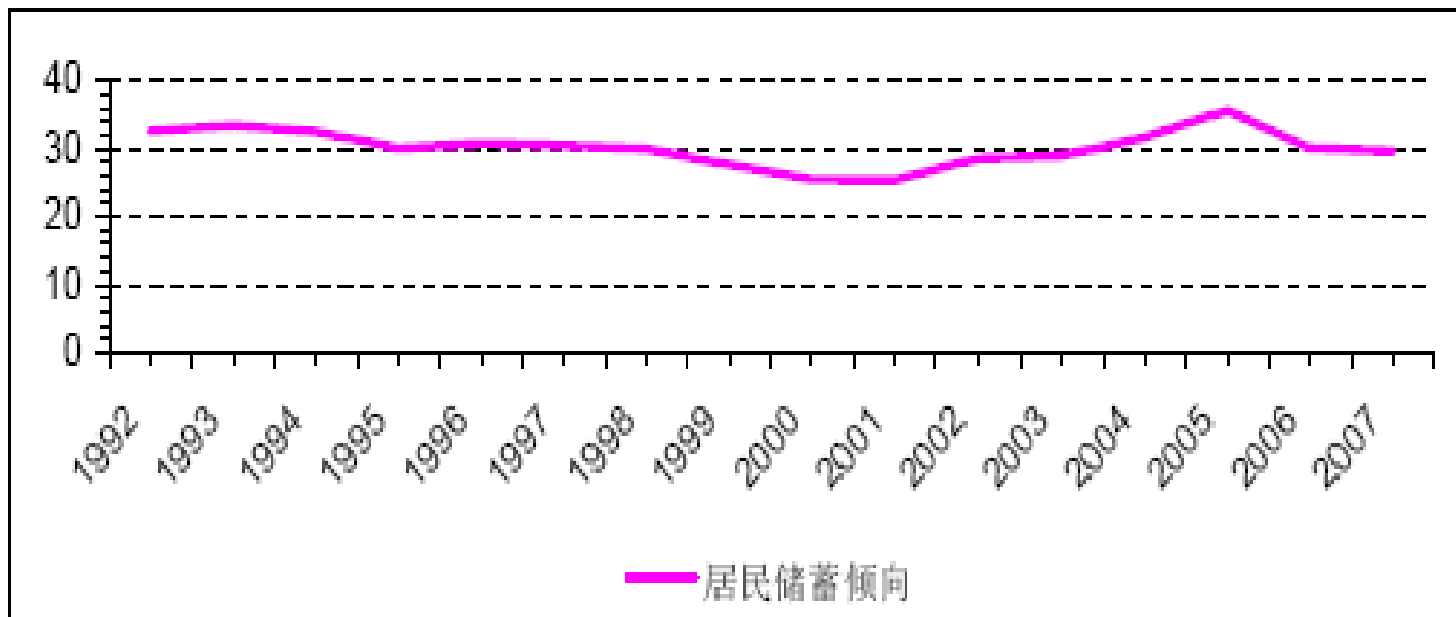
- Pro-growth factors which may continue to contribute positively as much as before;
- Pro-growth factors which may contribute increasingly than before, or new pro-growth factors;
- Pro-growth factors which may be decreasingly contribute than before;
- Counter-growth factors which may be problematic as same as before or less problematic than before.
- Counter-growth factors which may increasingly cause problems or new counter-growth factors which may increase the risk of the economy and slow down the growth.

## Simulating the negative effect of structural bias on growth



# Household sector savings rate

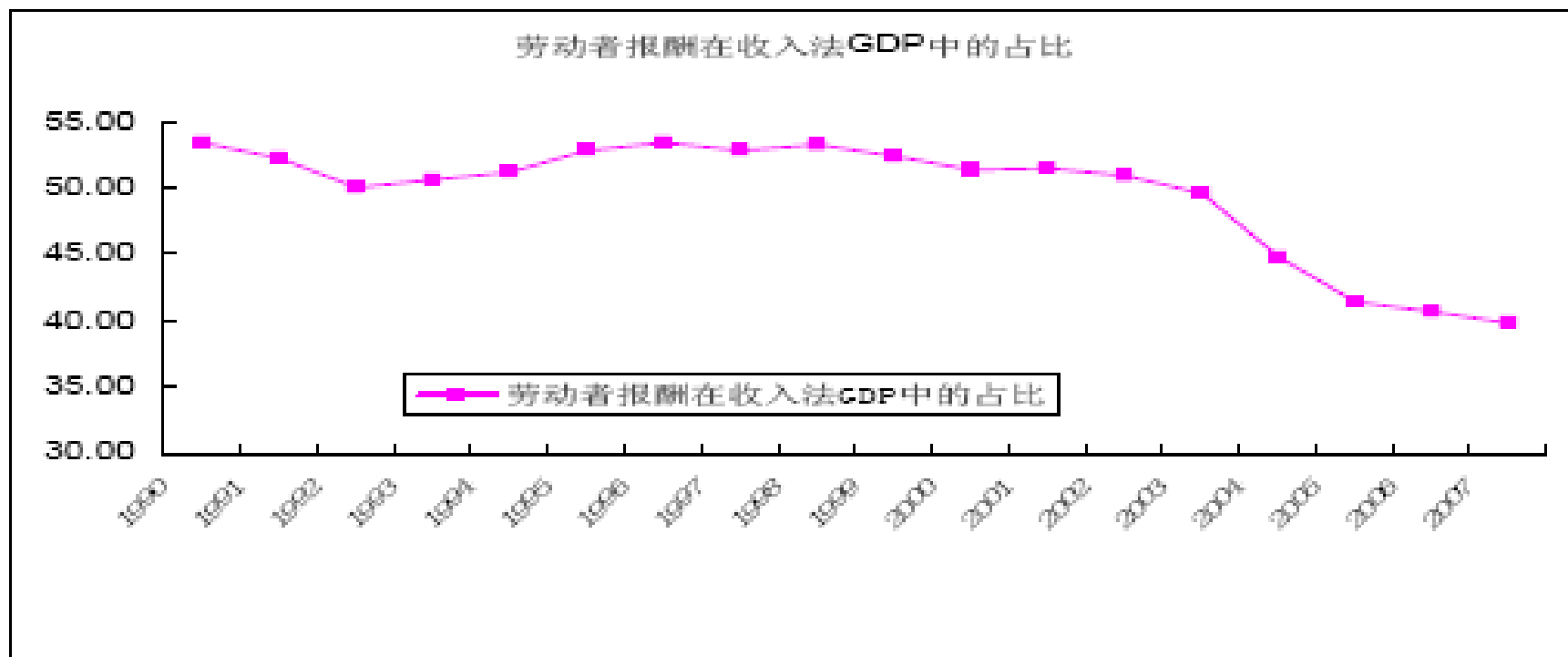
居民储蓄倾向



数据来源：中国统计局，历年《中国统计年鉴》，资金流量表。2006 和 2007 年的数据是根据相关变量进行估测的。

# Wage as % of GDP

劳动者报酬在 GDP 中占比的变动趋势



资料来源：《中国统计年鉴》，各年。

### Check list of growth factors of China

Growth factors	Recent to 07	2007-2010	2011-2020
Savings/capital investment	+++	+++	+++
Labor supply	+++	++	+
Human capital (education)	+	++	++
Spill-over effect by HC	+	+	++
R&D	+	++	++
FDI	+++	++	+
External financial shocks	0	-	--
Trade	+++	+++	++
External imbalance – protectionism, US\$ down	-	--	-
Reform I – marketization	++	+	+
Reform II – government costs	-	0	+
Reform III – financial system	+	++	+
Urbanization	++	+++	+++
Infrastructure improvement	+++	++	+
Financial risks – asset bubbles	--	--	--
Structural bias (consumption rate)	-	--	-
Income disparities	-	-	--
Resource efficiency	-	-	0
Environmental costs	-	-	--
<b>Net:</b>	<b>15 +</b>	<b>13 +</b>	<b>10+</b>