

**Comment on “Labour Productivity:  
Are Diverging Trends between  
Developed Countries Durable?”  
Michel Fouquin (CEPII)**

**December 5, 2008**

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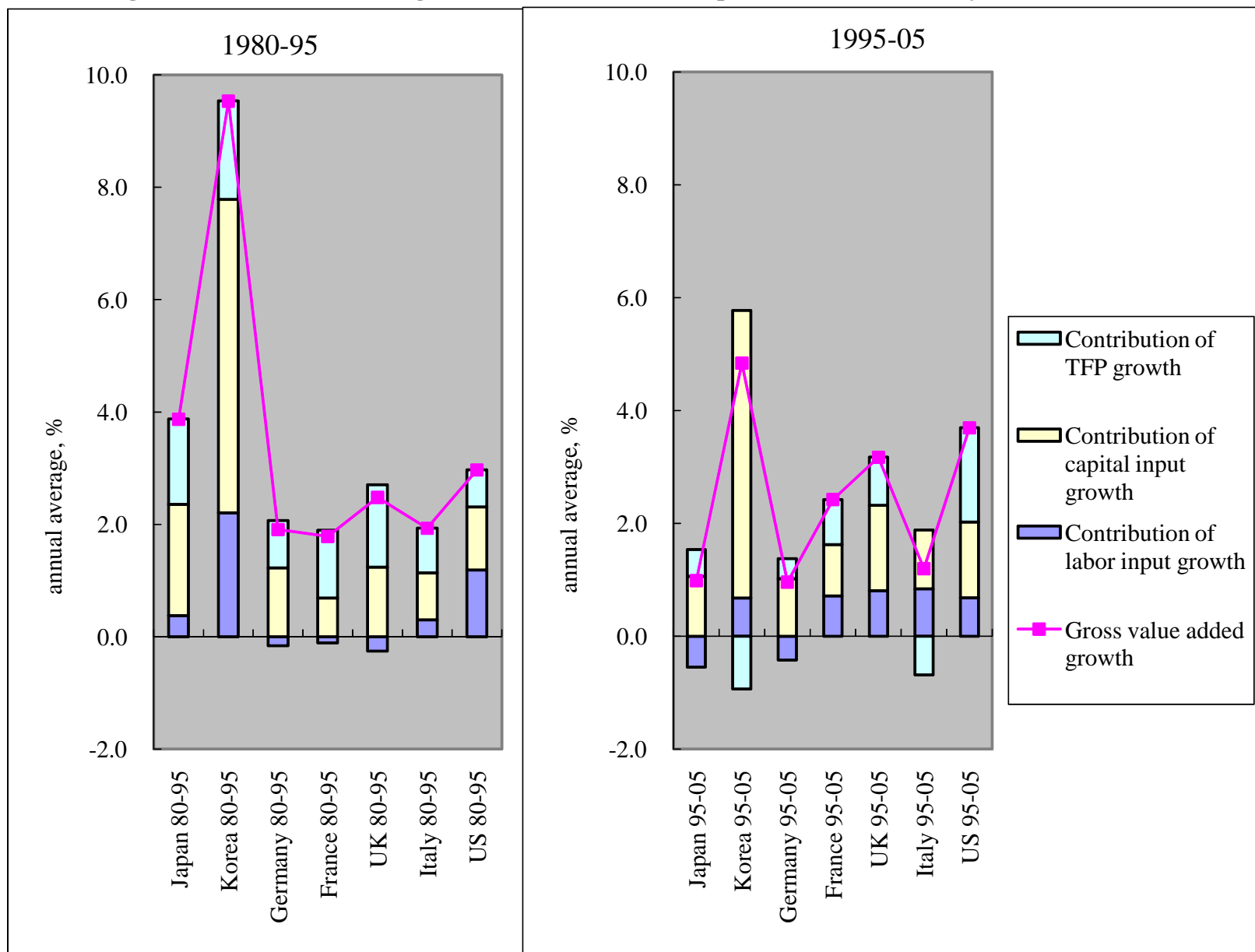
**Hitotsubashi University and RIETI**

# Main Findings of the Paper

- Many European countries and Japan experienced a significant slowdown of their labour productivity (LP) growth in the 1990s. In contrast, the US experienced an acceleration in LP growth.
- The slowdown of LP growth in Europe was mainly caused by a slowdown of multi-factor productivity (MFP) growth, not by a slowdown of capital accumulation, such as ICT investment.
- It seems that the slowdown of MFP growth was partly caused by the creation of new jobs in Europe. (Adjustment costs, costs of training workers, etc.)

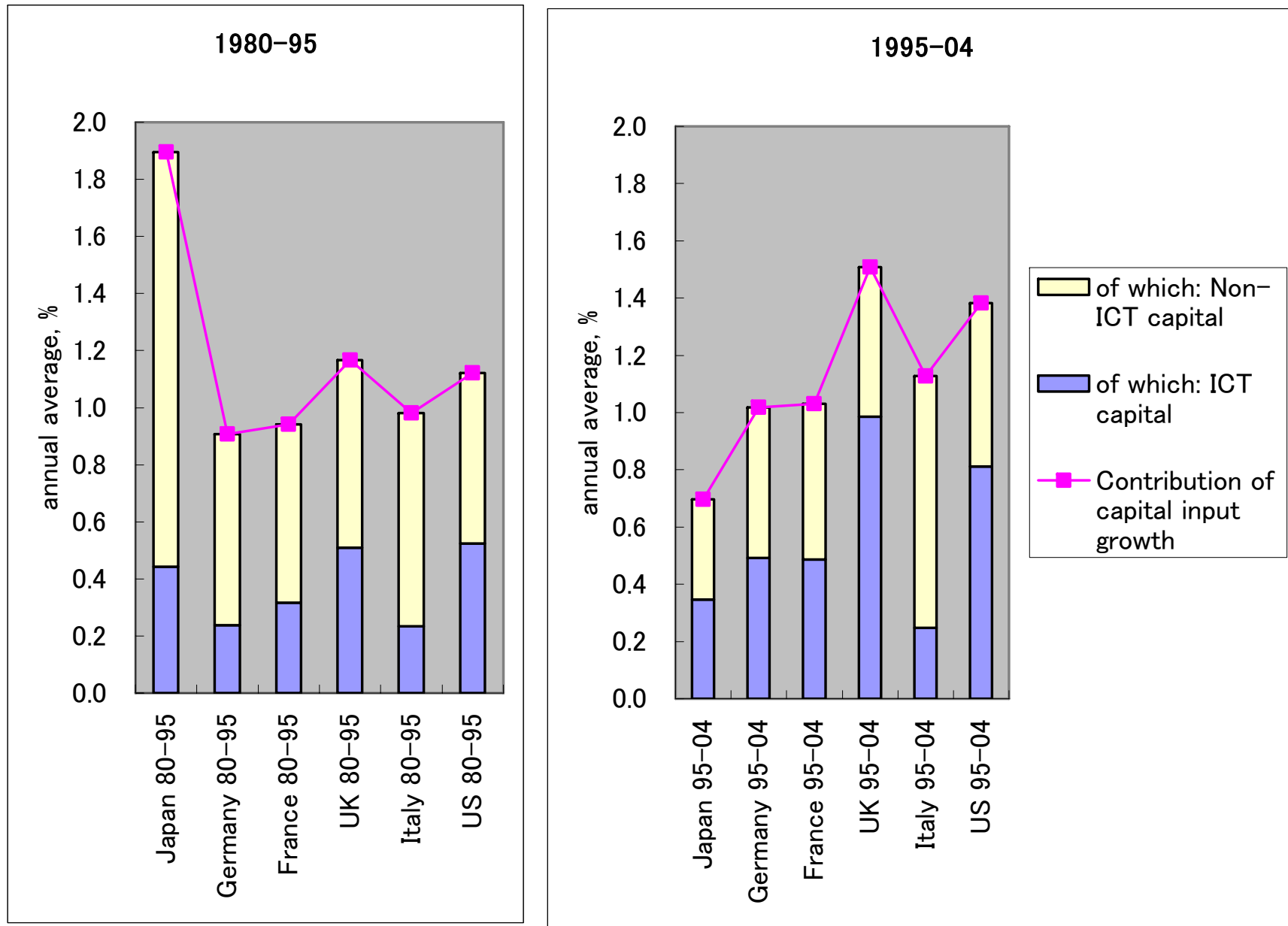
# Can we apply the same logic to Japan's case?

Figure 2-1 Growth Accounting for the Market Sector in Japan, the US, and the Major EU Economies



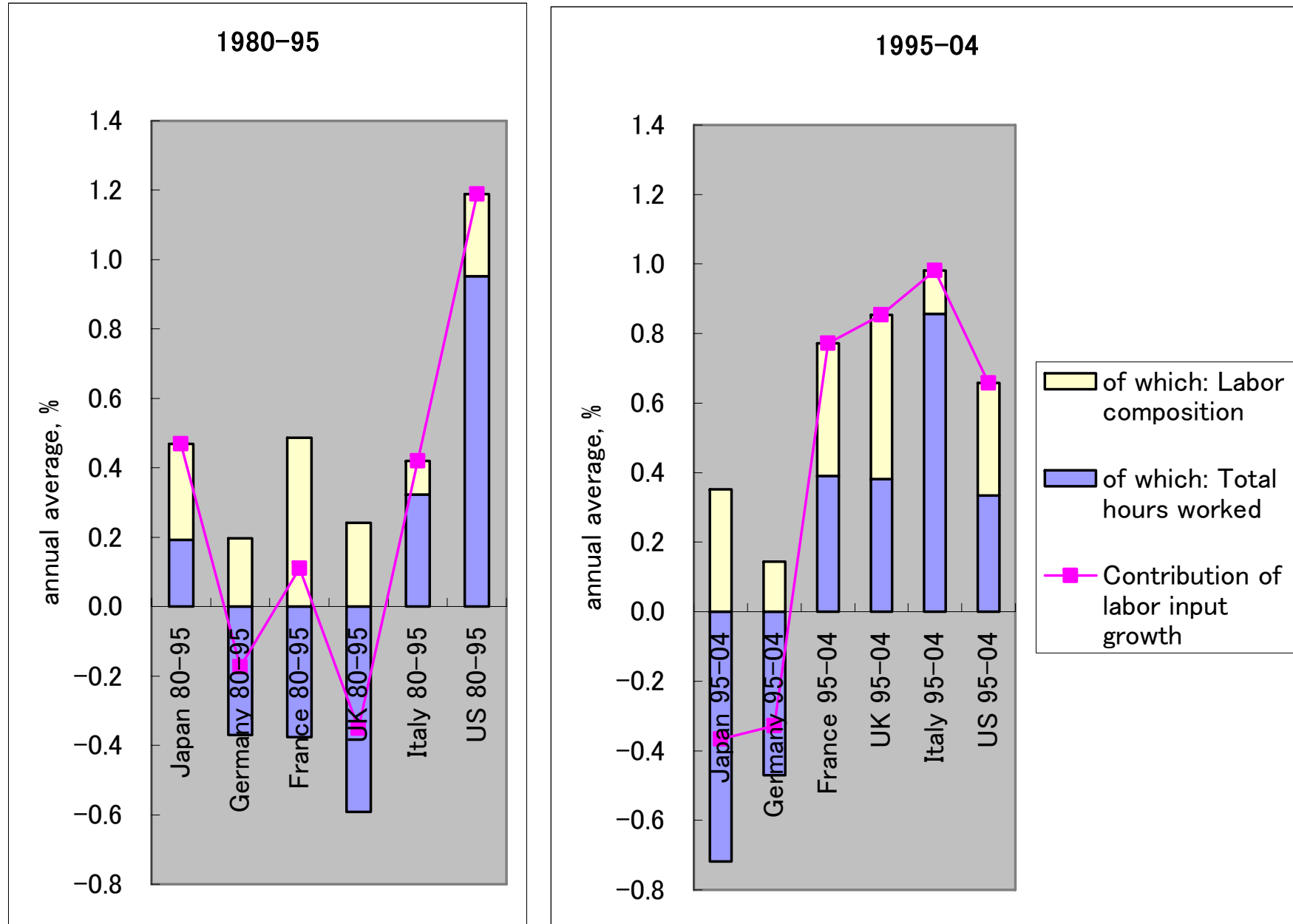
Source: EU KLEMS Database, March 2008.

Figure 3. Contribution of Capital Input Growth: Japan, the US and the Major EU Economies



Source: EU KLEMS Database, March 2007.

Figure 2. Contribution of Labor Input Growth: Japan, the US and the Major EU Economies

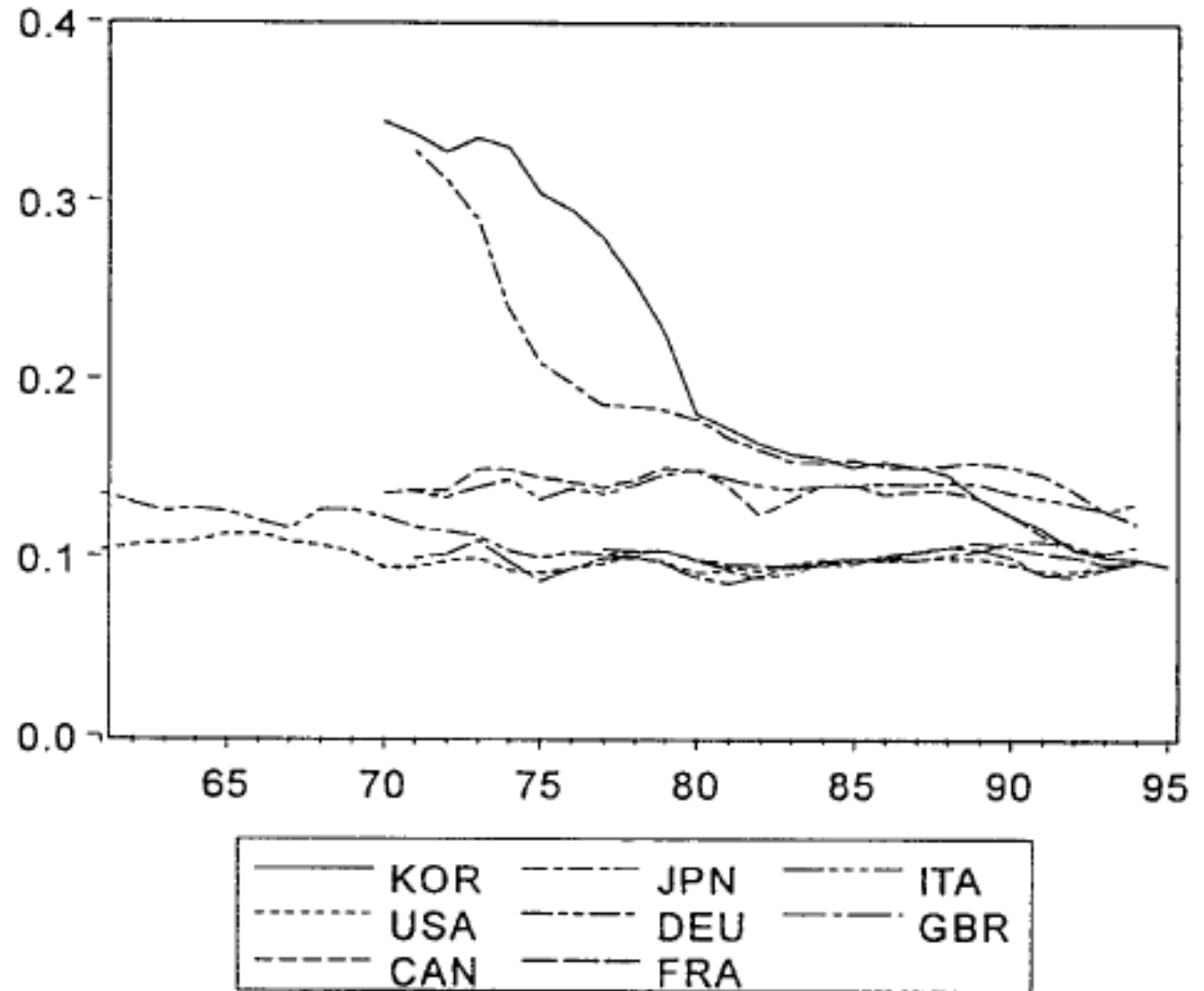


# Can we apply the same logic to Japan's case?

- The slowdown of LP growth in Japan was caused not only by a slowdown of MFP growth but also by a slowdown of capital accumulation. **The cause of this seems to be the continuous decline of the rate of return to capital.**
- In the case of Japan, we can not explain the slowdown of MFP growth by the creation of new jobs. **Probably, we can partly explain the stagnation of MFP by low ICT and intangible investment.**

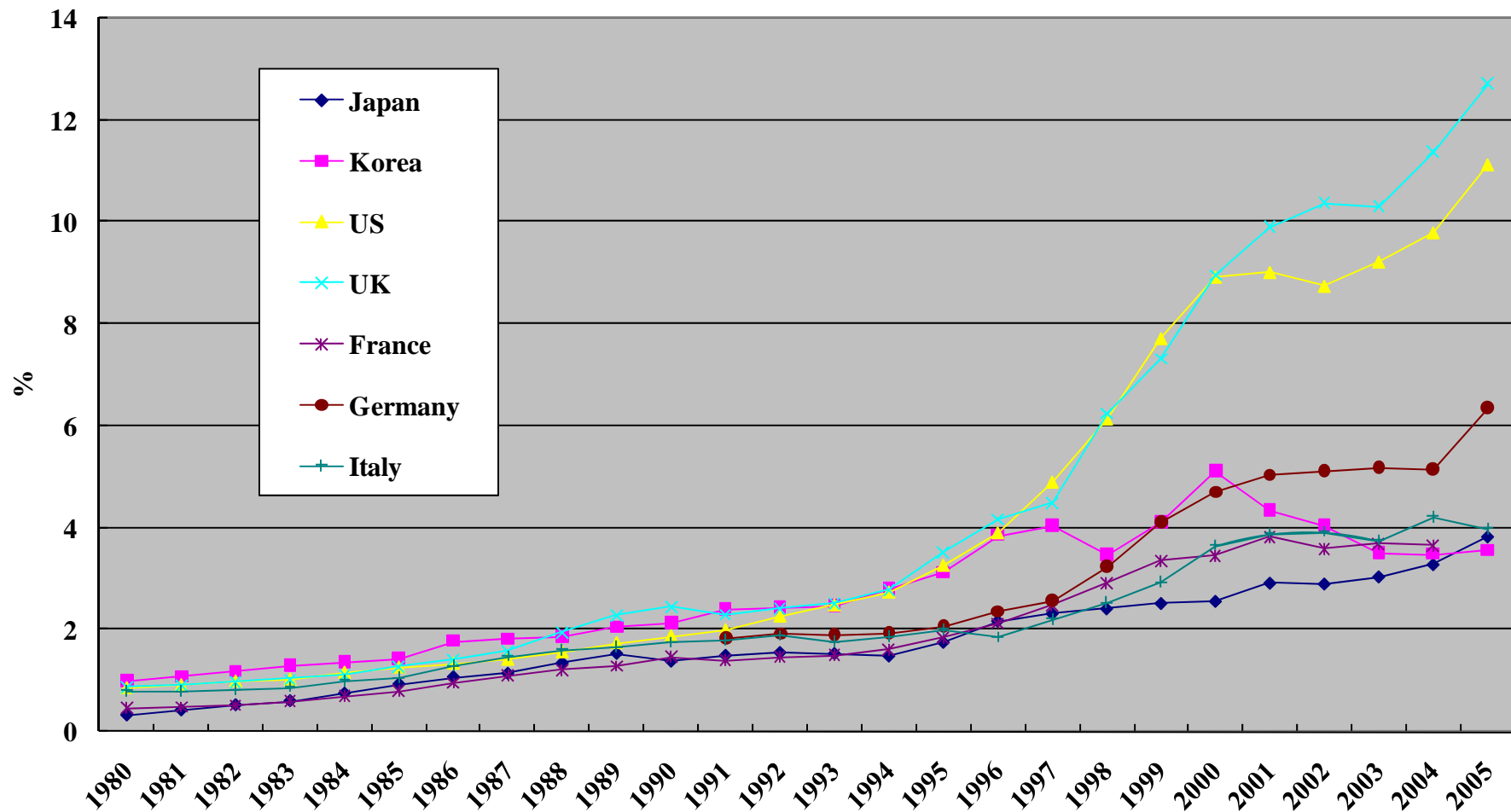
# Can we apply the same logic to Japan's case?

The gross rate of return to capital in Japan (and Korea) declined continuously from the 1970s.



- It seems that Japan did not experience an “ICT revolution,” partly because of the **stagnation of ICT investment.**

Figure 3-2 ICT Investment/GDP Ratio in the Major Developed Countries

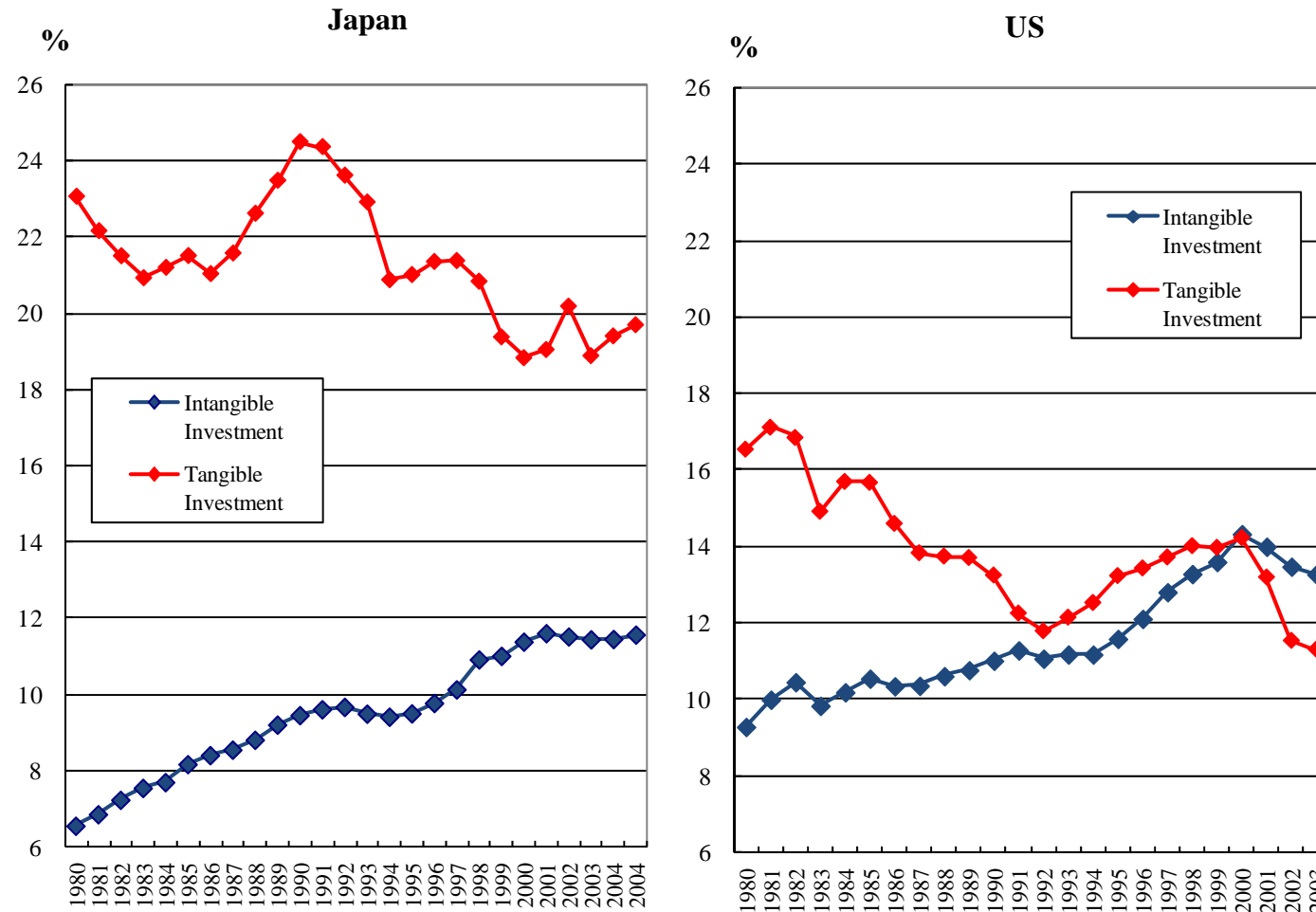


Source: EU KLEMS Database March 2008, JIP Database 2008, KIP Database



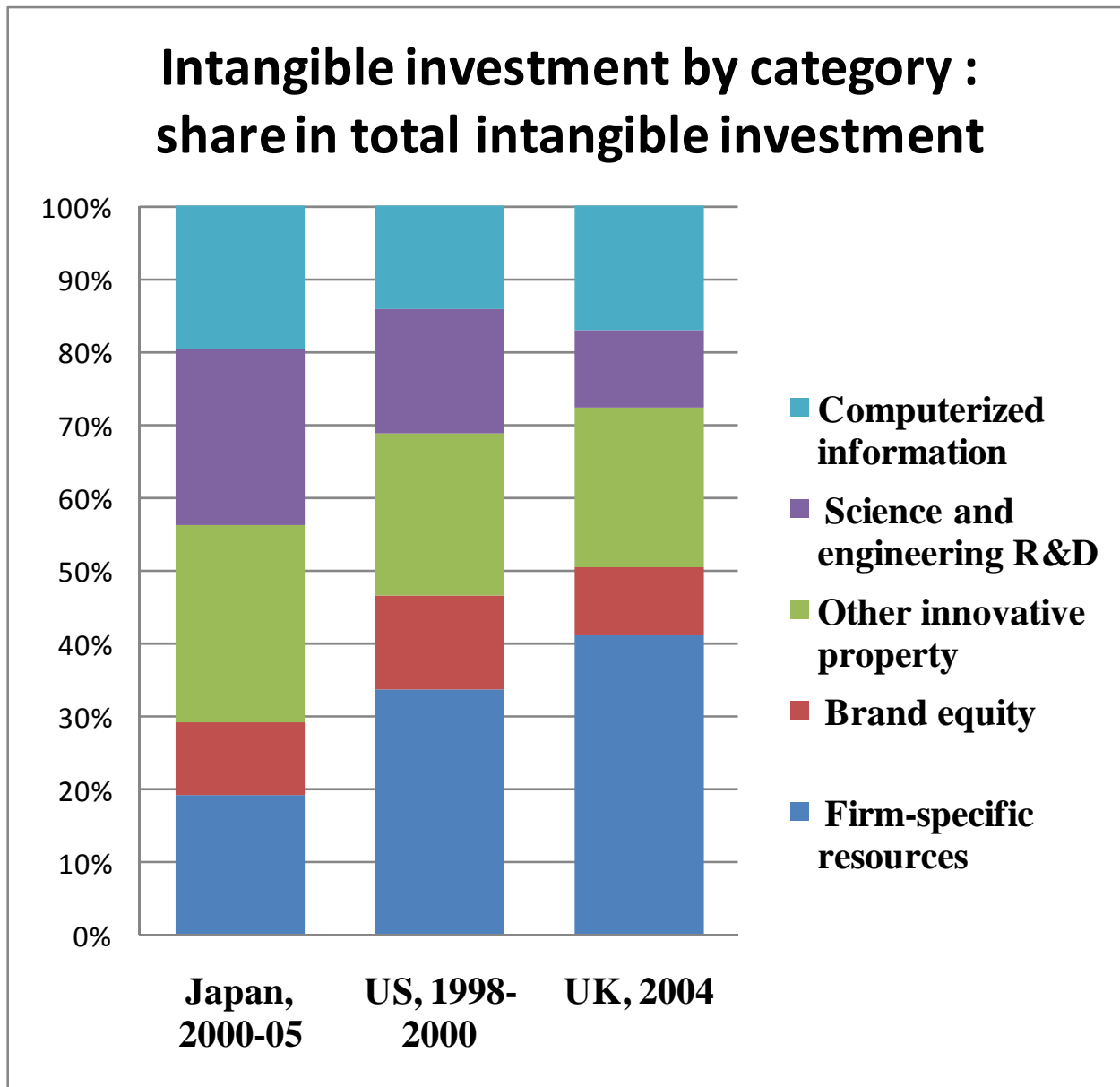
# Intangible Investment in Japan

- The intangible investment/output ratio in Japan is much smaller than that in the US.



Sources: Japan: Fukao et al., US: Corrado, Hulten and Sichel (2006).

Japan invests a lot in R&D but very little in economic competencies.

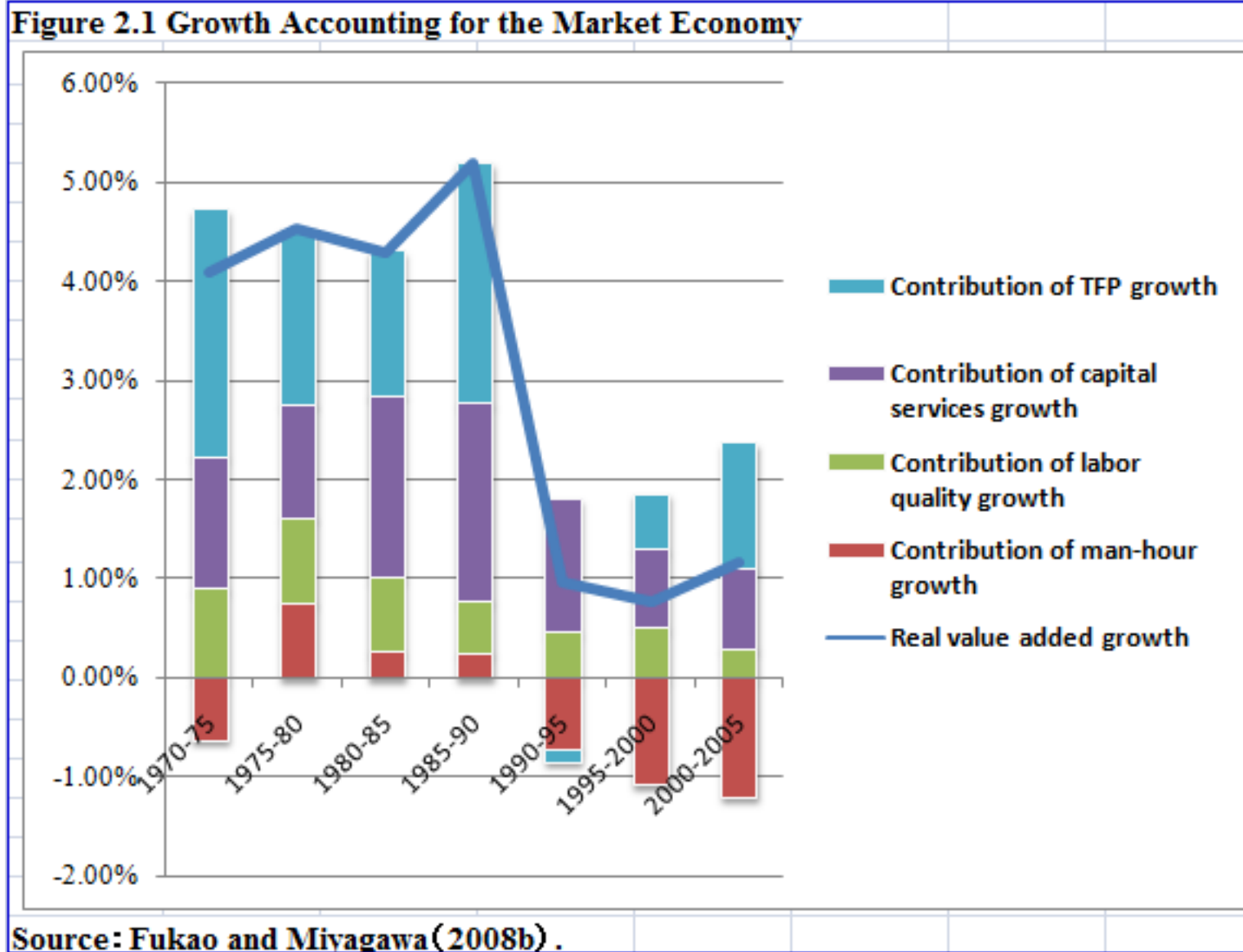


Sources: Japan: Authors' calculations, US: Corrado, Hulten and Sichel (2006), UK: Marrano and Haskel (2006).

## The intangible investment/GDP ratios of European countries are even lower than that of Japan.

<b>Private and Public Spending on Intangibles: France, Germany, the Netherlands, and Japan</b>				
	<b>(% of GDP)</b>			
	<b>France</b>	<b>Germany</b>	<b>The Netherlands</b>	<b>Japan</b>
	<b>2004</b>	<b>2004</b>	<b>2001-2004</b>	<b>2000-05</b>
<b>Computerized information</b>	0.90	0.86	1.35	2.3
<b>Innovative property</b>	3.76	4.12	3.07	5.9
<b>Economic competencies</b>	5.40	3.57	5.15	3.3
<b>Total Investment</b>	8.26	7.15	8.30	11.5
<b>Sources: France and Germany: Hao, Manole and van Ark (2008)</b>				
<b>The Netherlands: Van Rooijen-Horsten, van den Bergen, and Tanriseven (2008)</b>				
<b>Japan: Fukao et al. (2008)</b>				

# Japan's MFP growth has recovered since 2000.



In the 2000s, the most important source of Japan's economic growth was MFP growth.