



Will the U.S and Europe Avoid a Lost Decade? Lessons from Japan’s Post Crisis Experience

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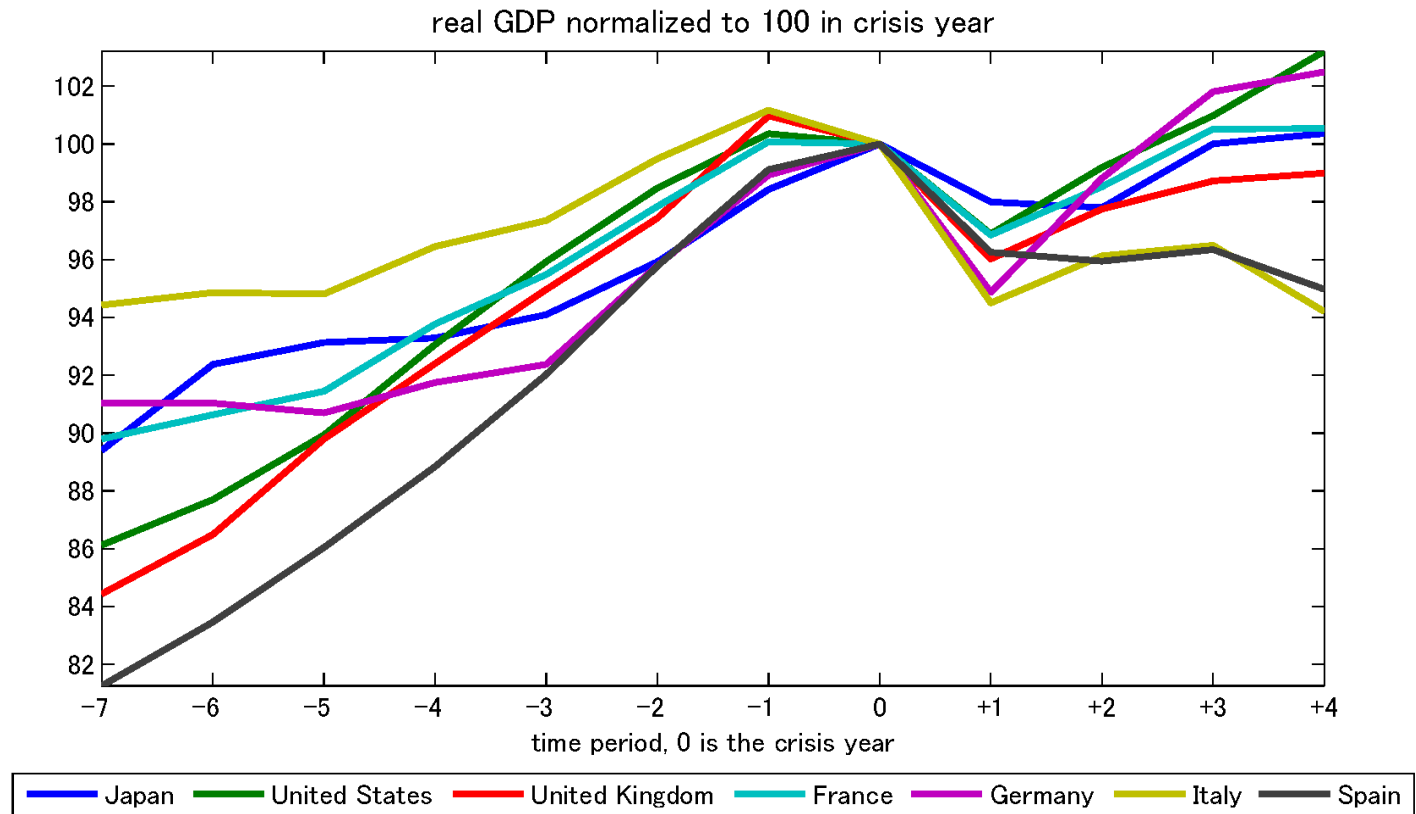
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Key Question: Will the U.S. and Europe experience stagnation similar to Japan?

- U.S. and Europe (in the late 2000s) compared to Japan (in the late 1990s)
- What went (especially) wrong in Japan
 1. Failure to clean up and recapitalize banks
 2. Failure to address structural growth problems
- Why did Japan make these mistakes?
- Are the U.S. and Europe likely to repeat these mistakes?
 1. In handling banking issues
 2. In structural reforms

Our Answer: Yes for Italy, Spain and France.
Probably not for Germany and the U.S.

Financial crisis followed by stagnant growth



Source: OECD National Accounts. "GDP, national currency, constant prices, OECD base year, millions"

Failure to clean up and recapitalize banks in Japan

Even after two rounds of public capital injections (1998 and 1999), Japanese banks continued to be undercapitalized

Date	Official core capital	Deferred tax assets	Estimated under-reserving	Modified capital	Bank assets	Capital gap
	A	B	C	D = A-B-C	F	G = 0.03*F-D
1996	27.9	0	NA	27.9	846.5	-2.5
1997	28.5	0	15	13.5	856	12.2
1998	24.3	0	4.9	19.4	848	6
1999	33.7	8.4	4	21.3	759.7	1.5
2000	35.6	8.2	5.8	21.6	737.2	0.5
2001	37.6	7.1	7.5	23	804.3	1.1
2002	30.2	10.6	6.8	12.8	756.1	9.9
2003	24.8	10.6	5.4	8.8	746.3	13.6
2004	29.0	7.2	5.7	16.1	746.7	6.3
2005	31.4	5.7	6.9	18.8	745.9	3.6
2006	37.3	2.3	8.3	26.7	766.9	-3.7
2007	40.0	1.3	9.4	29.4	761.1	-6.5
2008	34.8	3.6	10.2	21	780.7	2.4

Source: Takeo Hoshi and Anil K Kashyap (2010). "Will the U.S. Bank Recapitalization Succeed? Eight Lessons from Japan," *Journal of Financial Economics*, 97, 398-417, Table 1.

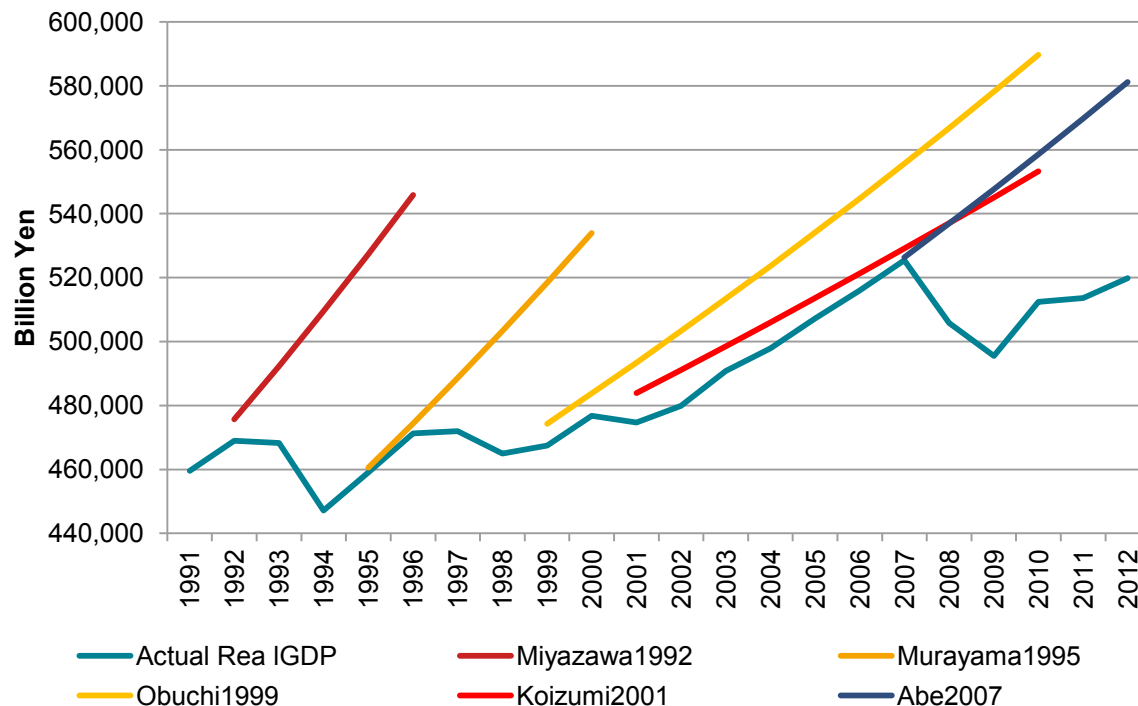
Undercapitalized banks → Rollover of loans to zombie firms → Low growth

- Gambling for reclamation as described by Peek and Rosengren (2005), Sekine, Kobayashi, and Saita (2003), Caballero, Hoshi, and Kashyap (2008).
- van Wijnbergen and Homar (2013) provides an empirical evidence that failure to clean up and recapitalize banking sector after a financial crisis is associated with slower growth in general
- Low interest rate environment in Japan also made it easier for the zombie lending to go undetected.

Failure to address structural growth problems

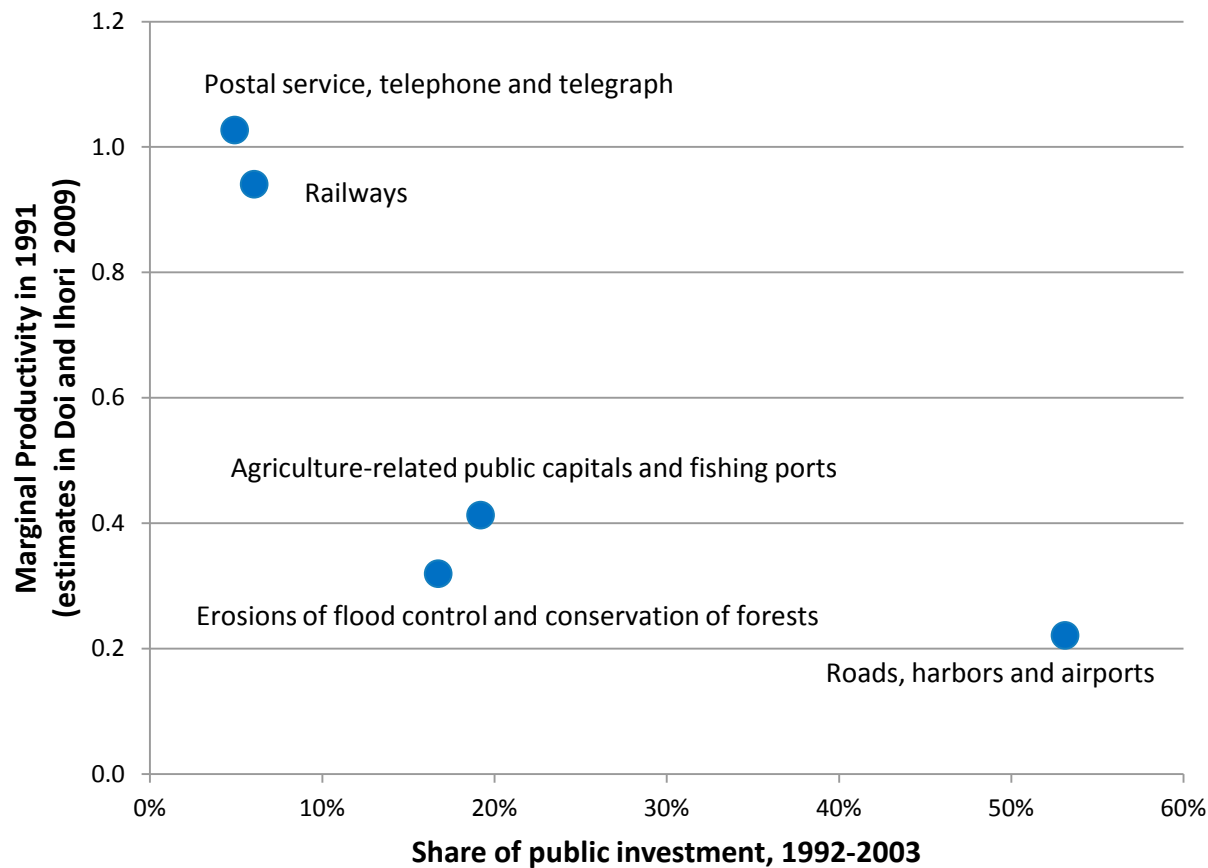
- Government believed that the collapse of the bubble economy in the early 1990s was just a temporary shock to the growth and the recovery was around the corner

Figure 6. Government Growth Forecasts



Ended up relying on unproductive public works to stimulate growth

Figure 8. Public investment share and marginal productivity



Even after the need for structural reform was recognized, the response has been slow

- Koizumi's pamphlet in September 2001 *The First Step in Changing Japan* lists 35 major initiatives
- But only 8 of those are clearly growth enhancing
 - 11 were unrelated to growth, and 16 were indirectly related
- Worse still, of the 8 Koizumi reforms, 6 of them are still included in Abe's growth strategy in 2013.

Why didn't Japan recapitalize its banks?

1. Public outrage at the earlier small scale bailout made politicians cautious
2. Fear of triggering a panic
3. Reluctance to admit the problem in order to deflect responsibility by the regulator (MOF)

Why Japan didn't accelerate its structural reforms

1. Politicians preferred a safety net that protected jobs in regulated industries rather one based on social programs provided to all citizens
2. Shift from Multi-Member District / Single Non-Transferable Vote election system to Single-Member District system (in 1993) raised the political cost of economic reforms that hurt the median voter (at least temporarily)
3. Farmers and the elderly are especially protected and districting rules gives them disproportional power

Banking issues in Europe

- Similar to Japan, banks are still undercapitalized
- Reasons for undercapitalization and lack of bank restructuring
 1. Absence of public backstop due to resistance of relatively strong countries to bail out banks
 2. European authorities' fear of triggering instability
 3. Stress tests looked at risk-weighted capital ratios (instead of level of capital) → many European banks restored “health” by reducing risk-weighted assets (sometimes shifting into sovereign bonds)

Banks are still undercapitalized (billion euro)

	France	Germany	Italy	Spain	Total
Capital Raised 7/2007 to 12/2010	20.6	13.5	15.5	24.4	74
Capital Raised 1/2011 to 9/2013	1.3	16.5	18	9	44.7
Interest Earning Assets 12/2010	2294.7	1711.5	1672.1	2373.7	8052
Interest Earning Assets 12/2012	2344.5	1838.7	1684.7	2637.4	8505.3
Risk Weighted Assets 12/2010	1307.8	613.7	1085.5	1441.1	4448
Risk Weighted Assets 12/2012	1169.2	541.7	950.3	1351.5	4012.7
Impaired Loans	86.6	28.8	189.9	165.5	470.8

Bank undercapitalization

- Makes credit tight
 - Note that Europe, like Japan, has a bank dominated system
- Creates incentives to gamble for reclamation by loading up on sovereign debt
 - The ECB Long-Term Refinancing Operations facilitate this by making it cheaper for weak banks to take these risks

Banking issues in the U.S.

- Banks raised substantial equity starting in 2009
 1. SCAP (Supervisory Capital Assessment program) expressed capital needs in terms of dollars → Banks couldn't comply by shrinking their risk-weighted assets
 2. Public backstop for banks that cannot be recapitalize on their own
 3. Non-performing loans already reduced to low levels by 2013
 4. Credit crunch does not seem to be a problem in the U.S.
 5. Capital markets have been working as an alternative to bank financing

U.S. Banks recapitalized more quickly (billion dollars)

	U.S.	Bank of America	Capital One	Citigroup	JPMorgan Chase	PNC Financial Services	US Bancorp	Wells Fargo
Capital Raised 7/2007 to 12/2010	171.9	51.2	2.5	39.7	18.2	4.4	2.8	34.4
Capital Raised 1/2011 to 9/2013	11.1	0	6.3	0.3	0	0	0	0
Interest Earning Assets 12/2010	7921.8	1897.6	175.7	1753.6	1677.5	224.7	252	1064.2
Interest Earning Assets 12/2012	8274.3	1770	255.1	1676.3	1842.4	248.6	306.3	1169.5
Risk Weighted Assets 12/2010	5873.5	1455.9	127.1	977.6	1175	216.3	247.6	980
Risk Weighted Assets 12/2012	6032.9	1206	223.5	971.3	1270.4	260.8	287.6	1077.1
Impaired Loans	165.5	37.5	2.5	38.3	24.6	4.6	5.1	37.3

Structural problems in Europe

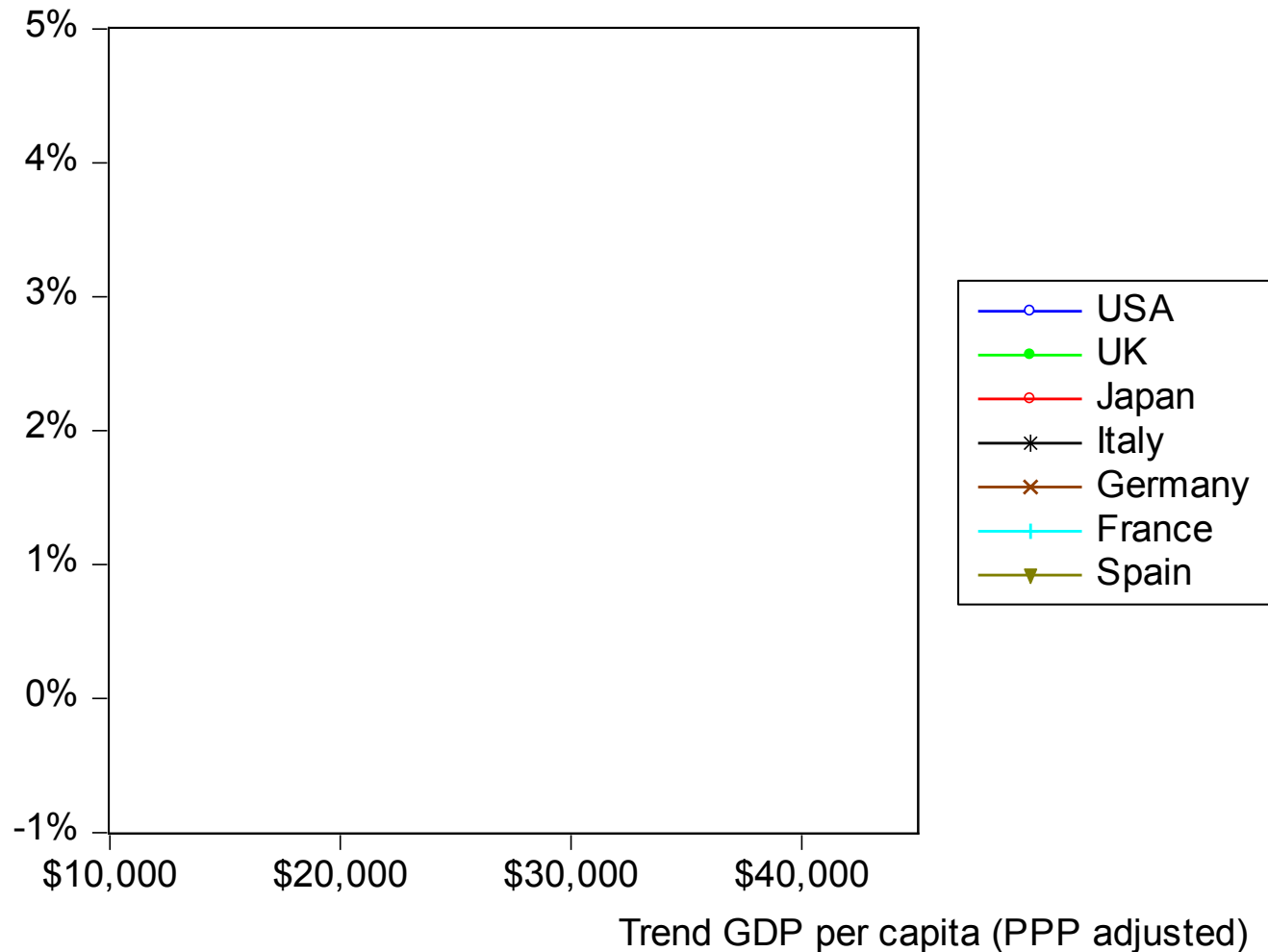
- As in Japan, Europe had many known structural impediments to growth **prior** to 2007.
- But pre-crisis progress was limited except in Germany which undertook its “Agenda 2010” program.
- The 2013 IMF Article IV diagnosis of the problems facing France, Italy and Spain look remarkably similar to lists from the **2003** Article IV reports.
- But enacting reforms with weak growth is more challenging than when Germany got started.

Structural problems in the U.S.

- U.S. structural problems prior to the crisis do not really resemble the European and Japanese ones
 - Perhaps the U.S. was growing above trend, but did not need labor market reforms
 - The U.S. does have other important growth challenges
- We have a partial explanation for the weak U.S. recovery. Some due to payback for unsustainable pre-crisis growth, some due to policy uncertainty (especially regarding fiscal policy).

Trend growth rates for Japan, U.S. and Europe

Trend Growth Rate



Conclusions

- Two factors contributed to Japan's stagnation after the banking crisis in the late 1990s
 1. Failure to clean up and recapitalize the banks
 2. Insufficient structural reforms to raise long-term growth rate
- Europe (except for Germany) seems to be repeating these mistakes.
- The U.S. does not seem to face these particular problems, but does face others.