How did the Japanese economy *really* adjust? Lessons for Europe

Sébastien Lechevalier

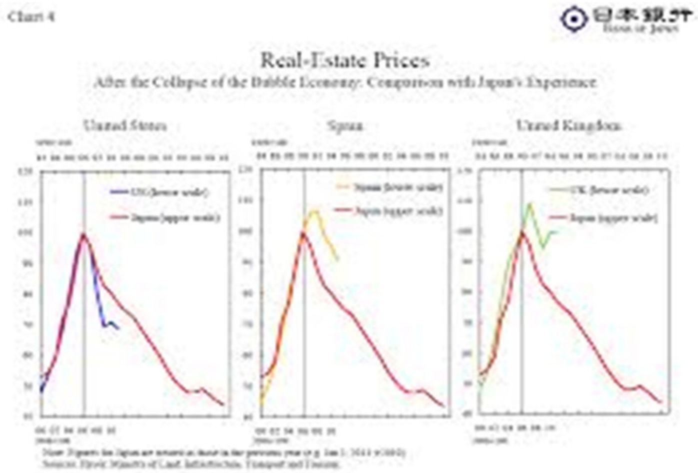
(EHESS & EHESS Paris 日仏財団)

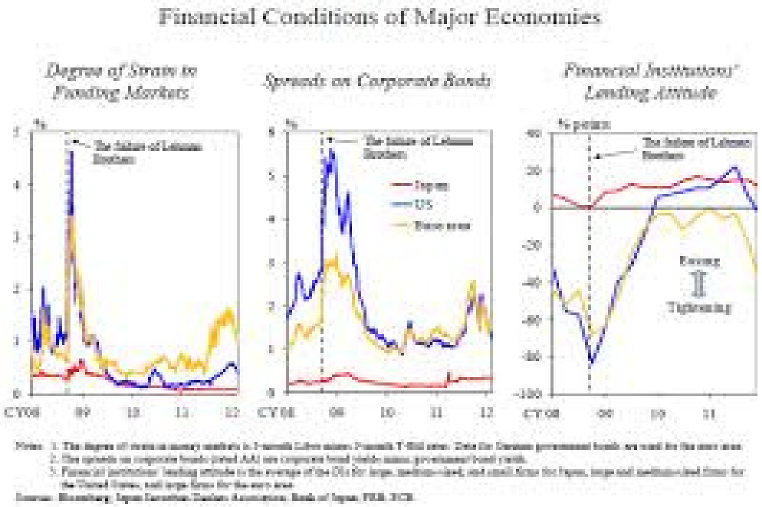
Brussels, 2013/10/7

Bruegel – Kobe U – FFJ conference

日仏財団
EHESS Paris
FONDATION FRANCE-JAPON DE L'EHESS

“Is the world following Japan’s long and winding road?” (M. Shirakawa, 2012)





Issues at stake for Europe (and the US)

1. Growth: economic stagnation as during Japanese lost decade?

2. **After the collapse of bubbles: how to deal with (sovereign, corporate, households, international) debts? Which underlying mechanisms (deleveraging)?** (See for example Reinhart & Rogoff, 2009)

3. Which economic policy?

✓ Any degree of liberty on the side of monetary policy?

✓ Is fiscal consolidation the only horizon?

日仏財団
EHESS Paris
FONDATION FRANCE-JAPON DE L'EHESS

Balance-sheet recessions: toward a new consensus regarding the understanding of the aftermath of financial crises?

- After a financial crisis (such as the one that Japan experienced in the early 1990s and the world around 2007-2008), drop of asset prices and deceleration of growth may lead to a special type of recession: balance-sheet recession
- Economic agents engage in balance sheet consolidation: reduction of debt ratios (deleveraging) and accumulation of liquidity
- This is done through increased saving and reduced spending → lower demand
- In this context, monetary policy become impotent (as agents accumulate liquidity and are not ready to borrow) and fiscal policy is problematic (as governments may “be forced” to engage in fiscal consolidation)
- It may lead to a vicious circle marked by long lasting stagnation

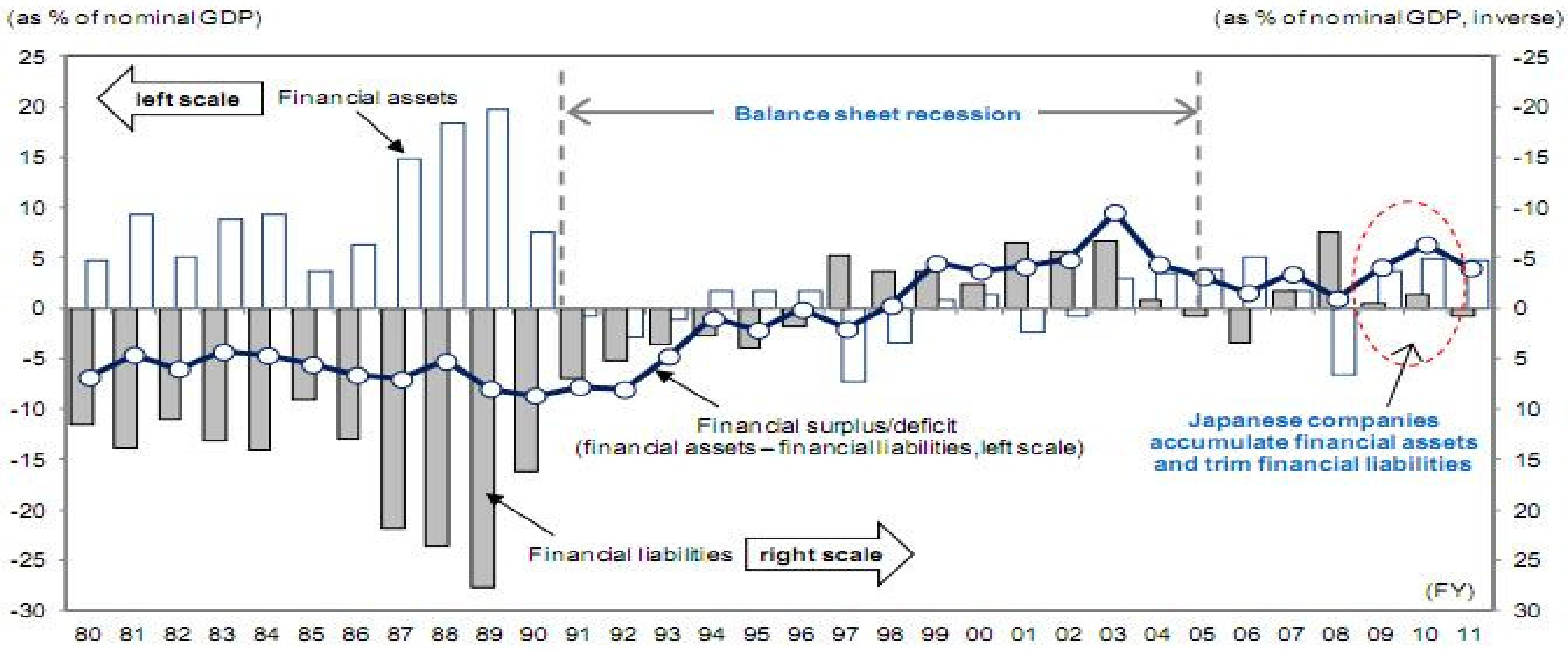
日仏財団
EHESS Paris
FONDATION FRANCE-JAPON DE L'EHESS

Japan: a textbook case? (Koo, 2011)

- Collapse of the Bubbles
- Deleveraging by economic agents
- Negative impact on investment, consumption, and therefore on demand
- (Surplus of current account)
- Helplessness of monetary policy (liquidity trap) but positive role of government's spending that has mitigated the negative consequences of declining investment
- Lasting economic stagnation and (mild) deflation

Japan in balance-sheet recession (Koo, 2011, fig 5)

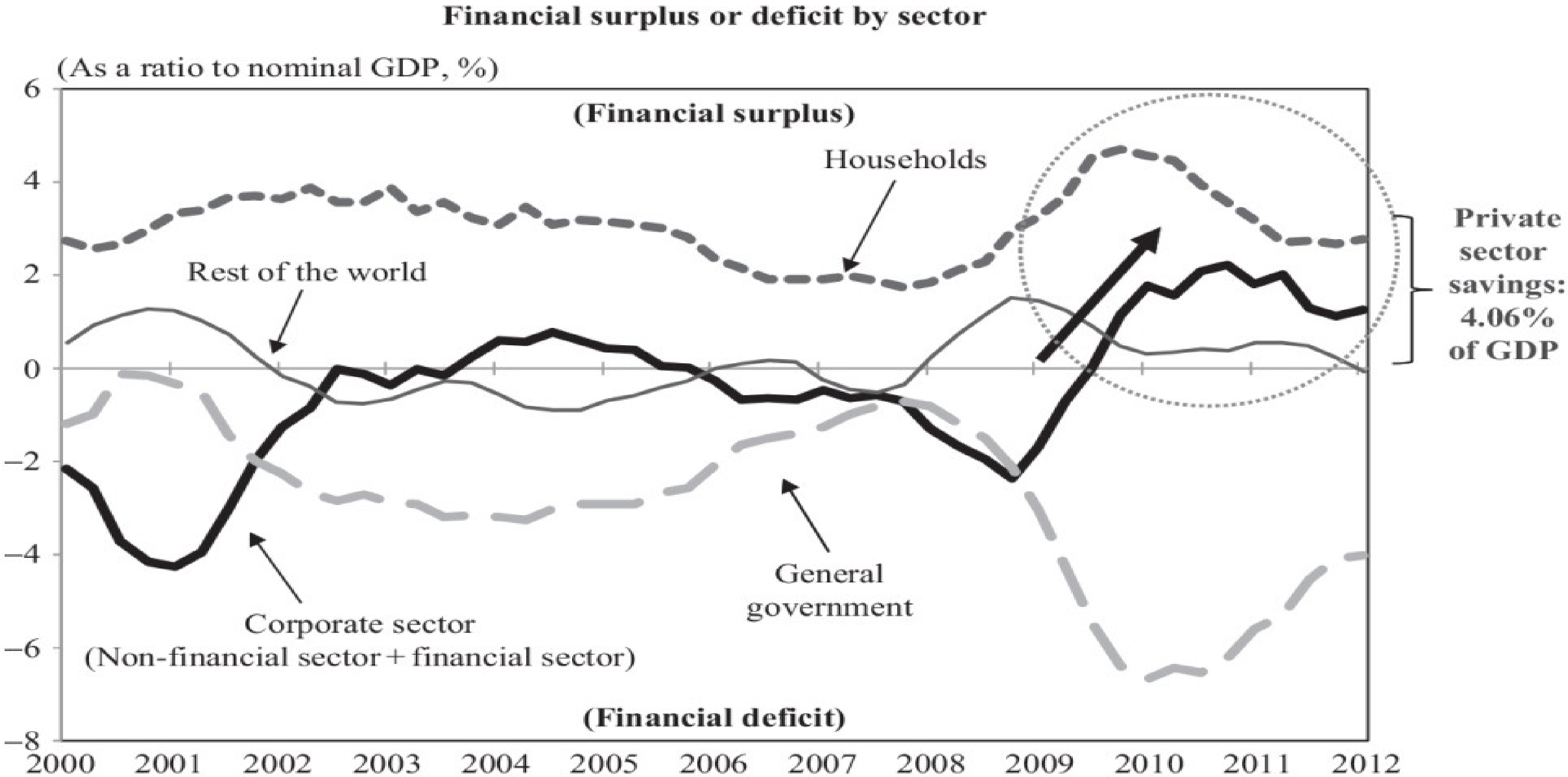
Fig. 1: Financial asset and liability flows at nonfinancial companies in Japan



Note: (1) Adjusted for impact of taking on liabilities related to the JNR Settlement Corporation and the National Forest Service (FY98), privatization of the Japan Highway Public Corporation (FY05), and postal service privatization (FY07). (2) The FY11 figure is the four-quarter moving average through Oct–Dec 2011.

Source: BOJ's Flow of Funds, and Cabinet Office's National Account Statistics

Eurozone in balance sheet recession (Koo, 2011, fig 14)



日仏財団
EHESS Paris
FONDATION FRANCE-JAPON DE L'EHESS

Today's presentation: what did really happen in Japan? Which lessons for Europe? A view from industrial and labor economics

- Focus on the corporate sector and more particularly the non-financial firms

- Taking seriously:

1. The impact of the financial system on the nature of the financial constraints faced by firms
2. The investment issue
3. The employment system and its evolution (income channel)
4. The evolution of wage/profit and rising inequalities
5. Firms' heterogeneity (importance of micro data)

日仏財団
EHESS Paris
FONDATION FRANCE-JAPON DE L'EHESS

A methodological note

- More technically, it means rephrasing the question: Which adjustments at the corporate level under financial constraints?
- Research program with N. Canry (U. Paris 1), H. Teruyama (Kyoto U.), H. Mizobata (Kyoto U.):

1. Model of joint labor and capital adjustment (Yashiv, 2011) with financial constraints
2. Micro level dataset
3. Deleveraging interpreted as a form of financial constraints, itself determined by the financial environment defined by the characteristics of the financial institutions (Bond et al., 2003) and economic policy variables

日仏財団
EHESS Paris
FONDATION FRANCE-JAPON DE L'EHESS

Today’s presentation: what did really happen in Japan? Which lessons for Europe? A view from industrial and labor economics

- While focusing on the corporate sector (capital and labor), we have to keep in mind:

1. The nature and the size of the initial shock : burst of bubble and side consequences (e.g. Ueda, 2012)
2. The background of rising public debt
3. Households’ saving and consumption
4. The international background (current account surplus)
5. Price dynamics (deflation)

Today's presentation: what did really happen in Japan? Which lessons for Europe? A view from industrial and labor economics

- **Do not overlook the following facts:**

1. (Gradual) Changes on the institutional environment (= as a result of structural reform = **liberalization**): a great transformation of Japanese capitalism (Lechevalier, 2014; research project with T. Hoshi, H. Miyajima, and M. Sako)
2. Decomposition of the balance-sheet recession – the lost decade (1992-2005) into two sub-periods

The end of 1990s is a turning point from the viewpoint of the severity of the crisis (Hamada & al., 2010), Wage flexibility (Kuroda & Yamamoto, 2014), deflation (Yoshikawa, 2013), the increasing heterogeneity of firms (Ito & Lechevalier, 2009), liberalization (Lechevalier, 2014), etc.

Increasing diversity of Japanese firms

- 2 stylized facts:

1. Increasing performance dispersion (Ito & Lechevalier, 2009: see appendix)
2. Corporate diversity (in terms of organization, corporate governance, employment practices) and institutional change (Aoki et al., 2007)

- Why does it matter ?

1. Impact on investment (Ito & Lechevalier, 2010)
2. Sluggish adjustment at the macro level but substantial differences across firms (Lechevalier et al., 2013)
3. More generally, source of micro/macro paradox

Investment and growth

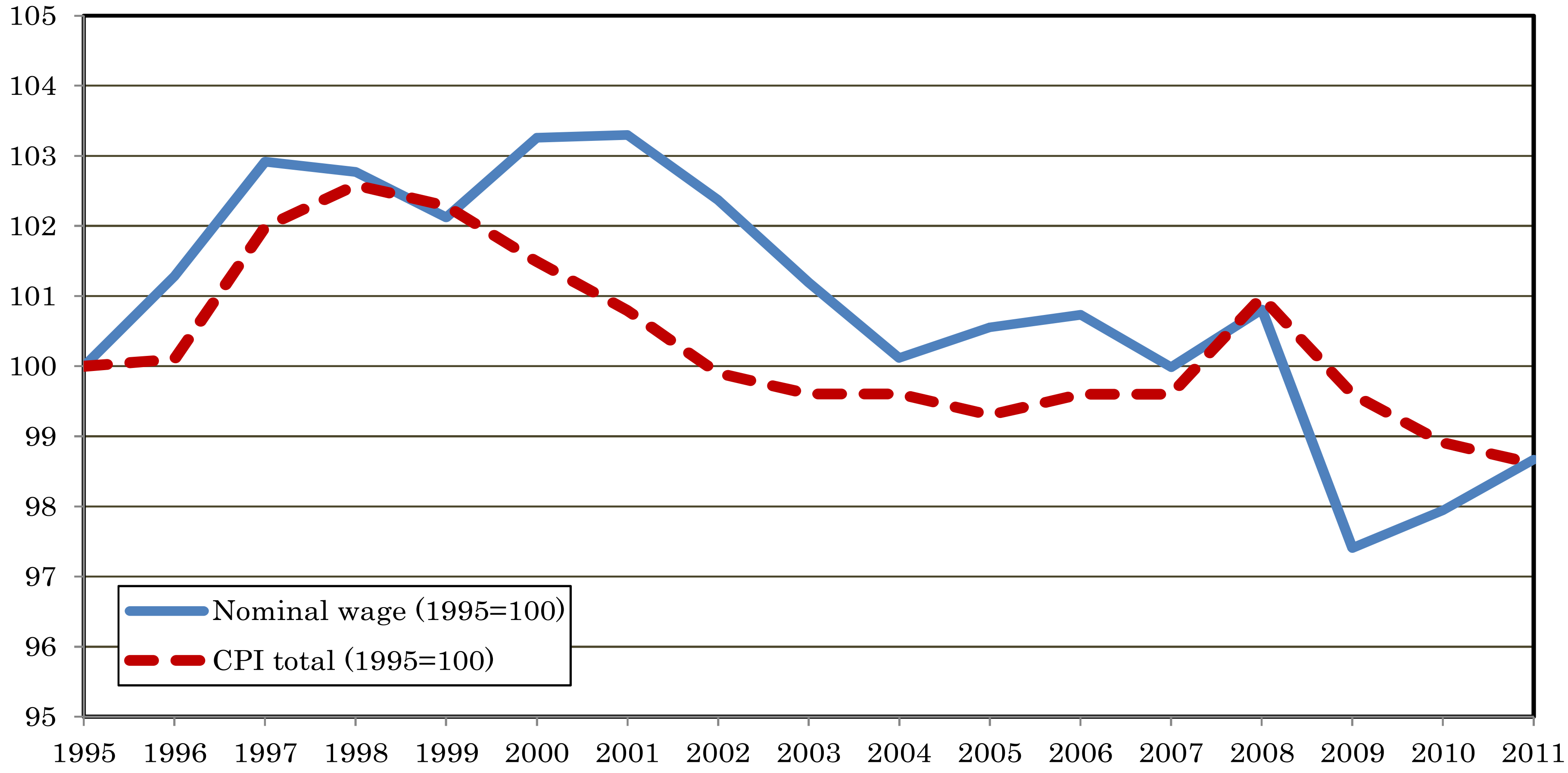
- The lost decade as a demand-led slump and private investment as its main driver (Yoshikawa, 2002)
- Lasting adjustment to the over-accumulation of capital
- Financial constraints and deleveraging
- Debt and Corporate restructuring (Hoshi et al., 2010)

Labor market adjustments

- Labor adjustment in Japan in historical perspective: internal flexibility (R. Dore). The apparent adjustment is therefore low by comparison to the US for example (Hashimoto, 1993)
- The case of the post-bubble: these practices have play a role in the 1990s until the turning point of the late 1990s
- Sign of a turning point: End of downward nominal wage rigidity; wage flexibility as the primary source of deflation (Kuroda & Yamamoto, 2014). From income effect to deflation (Canry et al., 2011)

日仏財団
EHESS Paris
FONDATION FRANCE-JAPON DE L'EHESS

Nominal wage and CPI at macro level (Kuroda & Yamamoto, 2014)



Source: SNA, CPI, and Labour force survey

➔ **At macro level, price ran parallel with nominal wage, suggesting that nominal wage cuts is the reason for deflation in Japan.**

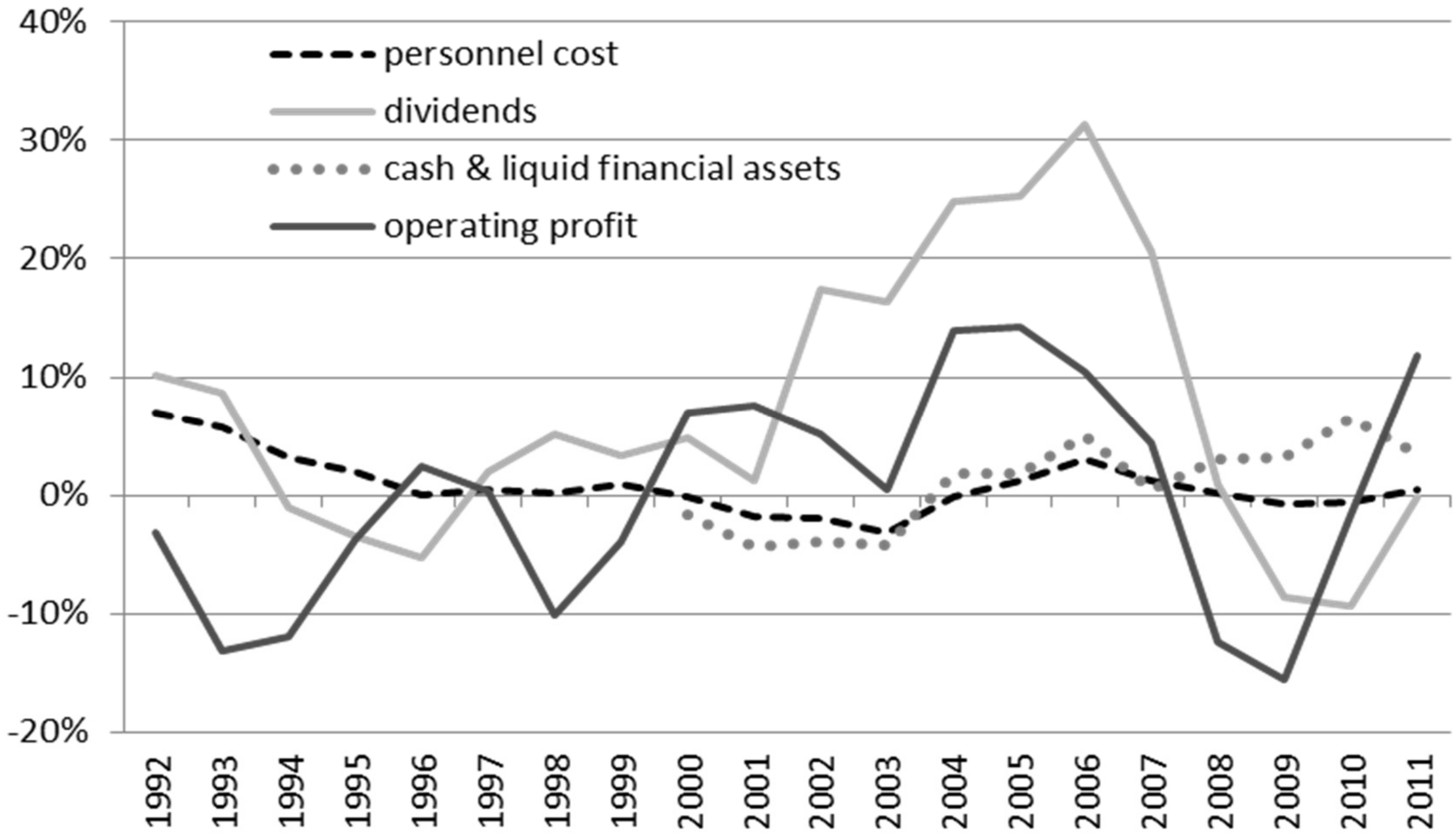
日仏財団
EHESS Paris
FONDATION FRANCE-JAPON DE L'EHESS

To summarize…

- The cost of the adjustment has been paid by the firms in a first step in a context of sluggish labor adjustment…
- The situation has been durably reversed from the late 1990s at the expense of employees
- See the following figures

日仏財団
EHESS Paris
FONDATION FRANCE-JAPON DE L'EHESS

Personnel cost, dividends, cash & liquid financial assets and operating profit of all industries in Japan (% change, 3-year moving average)

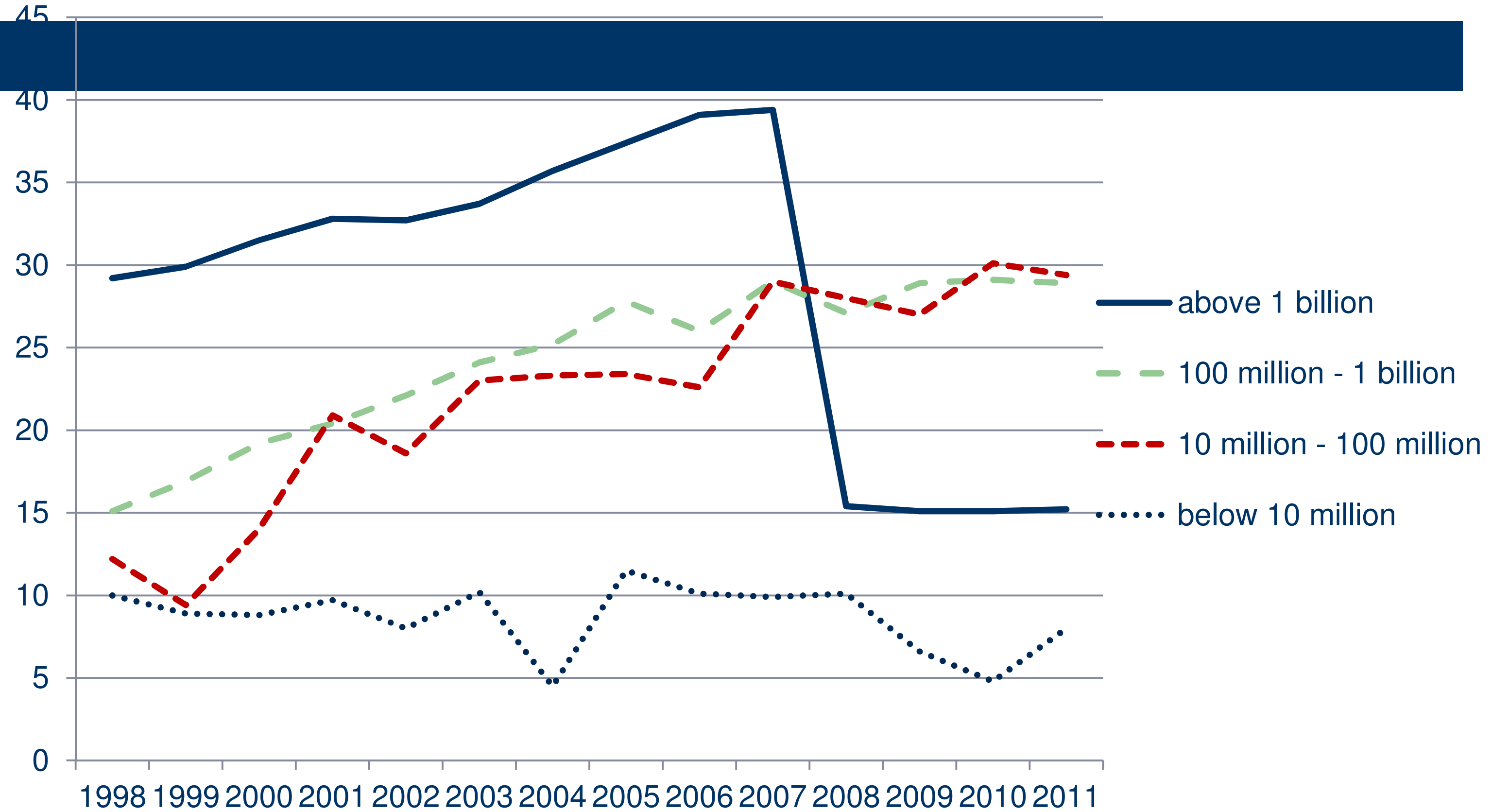


Source: Ministry of Finance, Policy Research Institute [2012], Heisei 23-Nendo Houjin Kigyo Tokei Chosa (Corporate Statistical Survey in 2011), http://www.mof.go.jp/pri/reference/ssc/results/index.htm (retrieved on December 16, 2012).

L'ECOLE DES HAUTES ETUDES EN SCIENCES SOCIALES

Companies enjoyed better financial health from the 2000s

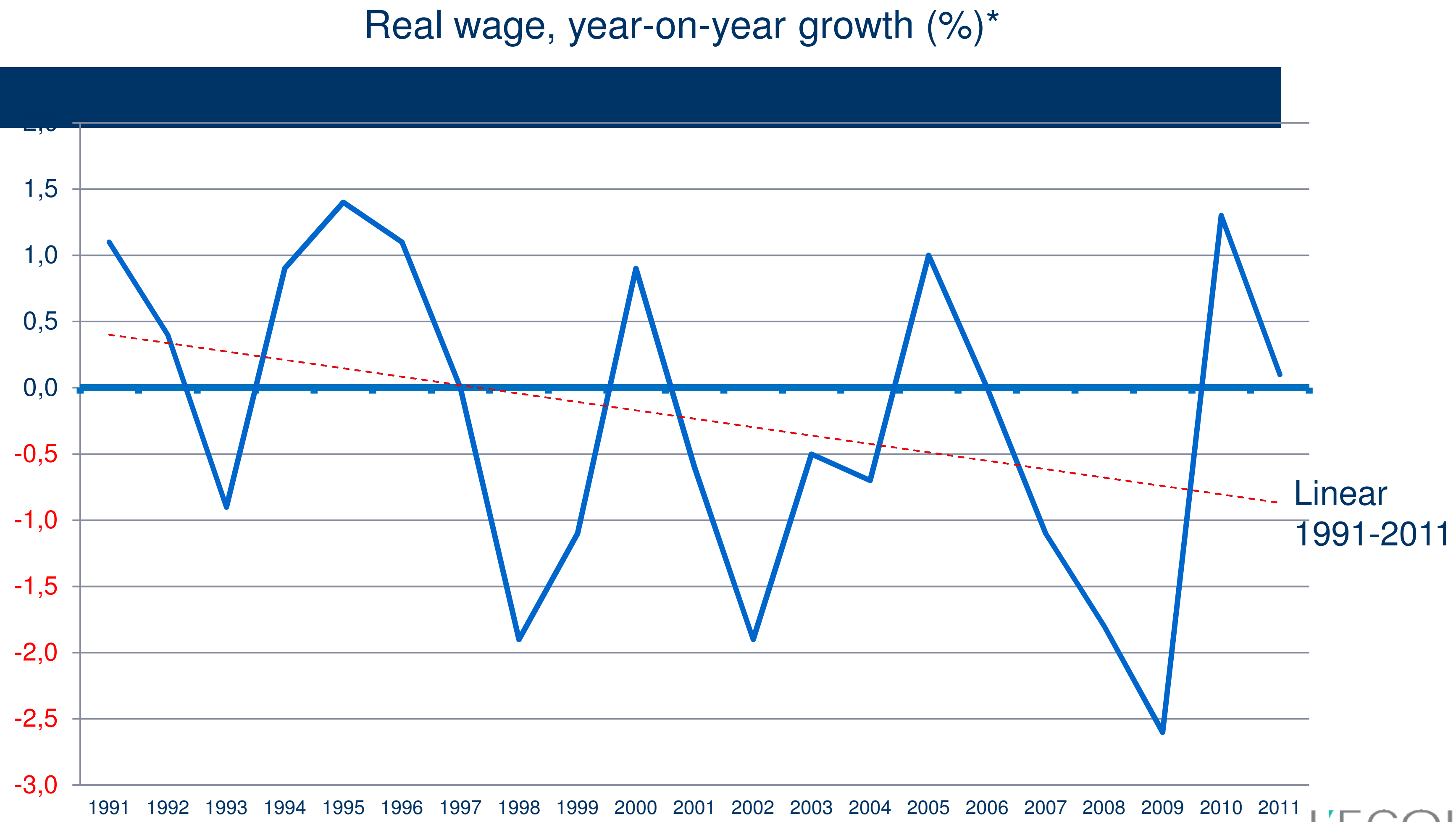
Capital adequacy ratio (%) * by capitalized amount group (yen), all industries



*Capital adequacy ratio (%) in this case was calculated as follows:
{(shareholders' equity – stock warrant) / total assets} x 100

Source: Ministry of Finance, Policy Research Institute [2012], Heisei 23-Nendo Houjin Kigyo Tokei Chosa (Corporate Statistical Survey in 2011), http://www.mof.go.jp/pri/reference/ssc/results/index.htm (retrieved on December 16, 2012).

This is the not the case for employees…



** Establishments with 5 employees or more*

Source: Ministry of Health, Labour and Welfare [2012]; Monthly Labour Survey (retrieved on December 16, 2012).

Lessons for Europe?

- Preliminary remark: despite general similar patterns, varieties of experiences in Europe
- Example: labor markets adjustments (Bakker & Zeng, 2013) – Ireland, Spain vs. Germany, Poland
- More generally, differences in:

1. The initial conditions – the “structure” which will affect the mode of adjustment (e.g. labor markets) and the nature of financial constraint
2. The nature and the size of the initial shock
3. The political environment that may conditions the pace and the direction of change (through reforms)

Comparison Japan-Europe

- Overall, which European country's trajectory does seem the most similar to the Japanese one? **A composite picture**:

1. From the viewpoint of the "structure": **Germany**
2. From the viewpoint of the of the nature and the relative size of the shock, **Spain** may be consider as more similar
3. From the viewpoint of the political environment (and the process of reform), **Italy** is relatively close

日仏財団
EHESS Paris
FONDATION FRANCE-JAPON DE L'EHESS

Final remark: What does Abenomics change?

- Allows introducing a discussion on the ceiling of public debt and the rhythm of fiscal consolidation
- More volatility
- Nothing regarding wages and labor situation, which is nonetheless the most problematic at this stage

References

- Lechevalier S. (2014), The great transformation of Japanese capitalism, Routledge.
- Kalantzis, Y., Kambayashi, R. & Lechevalier, S., 2012. Wage And Productivity Differentials In Japan. The Role Of Labor Market Mechanisms. *Labour: Review Of Labour Economics And Industrial Relations* , 26(4).
- Ito, K. & Lechevalier, S., 2009. The Evolution Of The Productivity Dispersion Of Firms- A Reevaluation Of Its Determinants In The Case Of Japan. *Review Of World Economics* , 145(3) : 405-429.
- Ito, K. & Lechevalier, S. (2010) 'Why Some Firms Persistently Out-Perform Others: Investigating The Interactions Between Innovation And Exporting Strategies', *Industrial And Corporate Change,* 19 (6): 1997-2039
- Lechevalier S., C. Hurlin, C. Dossougoin & S. Takaoka (2013), The Heterogeneity of Employment Adjustment Across Japanese Firms. A Study Using Panel Data, KIER working paper
- Canry N., J. Fouquau, and S. Lechevalier (2011) "Sectoral Price Dynamics in J Threshold Approach", *Economics Bulletin*, 31 (2): 1322-1335

日仏財団
EHESS Paris
FONDATION
FRANCE-JAPON
DE L'EHESS

References

- Aoki, M., Jackson, G. & Miyajima, H. ,Eds, 2007. *Corporate Governance In Japan: Institutional Change And Organizational Diversity.* Oxford: Oxford University Press.
- Bakker B.B. & L. Zeng (2013), Dismal Employment growth in EU Countries: the role of corporate balance sheet repair and dual labor markets, IMF working paper No 13/179
- Bond S. R., J. A. Elston, J. Mairesse & B. Mulkay (2003), Financial Factors and Investment in Belgium, France, Germany, and the United Kingdom: A Comparison Using Company Panel Data, The Review of Economics and Statistics, 85 (1): 153-165
- Caballero R.J., T. Hoshi, & A.K. Kashyap (2008), Zombie lending and depressed restructuring in Japan, American Economic Review, 98 (5): 1943-77
- Hamada K., A. K. Kashyap & D. E. Weinstein ed. (2010), Japan's Bubble, Deflation, and Long-term Stagnation, MIT Press.
- Hoshi T., S. Koibuchi & U. Schaede (2010), Corporate restructuring in Japan during the Lost Decade in Hamada et al. (2010)
- Koo Richard C. (2011), The world in balance sheet recession: causes, cure an politics, Real-world economics review, issue no.58

日仏財団
EHESS Paris
FONDATION
FRANCE-JAPON
DE L'EHESS

References

- Kuroda S. & I. Yamamoto (2014) Is Downward Wage Flexibility the Primary Factor of Japan's Prolonged Deflation?, Asian Economic Policy Review, 9 (1), forthcoming.
- Nishimura, K., Nakajima, T. and Kiyota, K. (2005) 'Does The Natural Selection Mechanism Still Work In Severe Recessions?: Examination Of The Japanese Economy In The 1990s', *Journal Of Economic Behavior and Organization,* 58 (1): 53-78.
- Ruscher E. & G. B. Wolff (2012), Corporate balance sheet adjustment: stylized facts, causes and consequences, Economic Papers 449, European Commission
- Shirakawa M. (2012), Deleveraging and Growth: is the developed world following Japan's long and winding road, Lecture at the London School of Economics and Political Science
- Ueda K. (2012), Deleveraging and monetary policy: Japan since the 1990s and the United States since 2007, Journal of Economic Perspectives, 26 (3): 177-202.
- Yoshikawa H. (2013) *Deflation*, Tokyo: Nihon Keizai Shimbunsha (in Japanese)
- Yoshikawa, H. (2002) *Japan's Lost Decade,* I-House Press.

Thank you for your attention

Sébastien LECHEVALIER

sebastien.lechevalier@ehess.fr

http://ffj.ehess.fr/

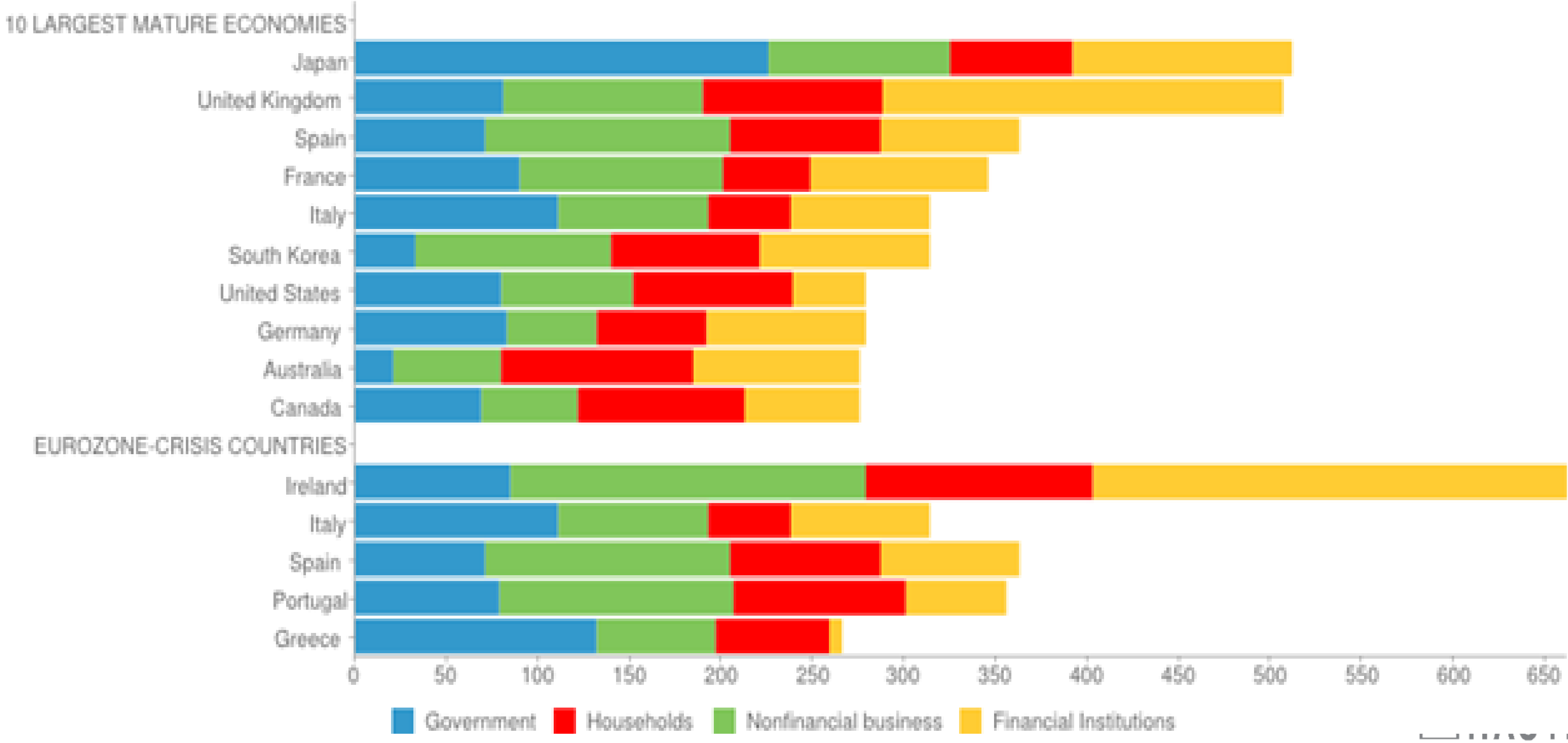
日仏財団
EHESS Paris
FONDATION
FRANCE-JAPON
DE L'EHESS

Appendix: The issue of debt

- Decomposition
- International comparison
- Debt, deleveraging and the nature of financial constraints for firms

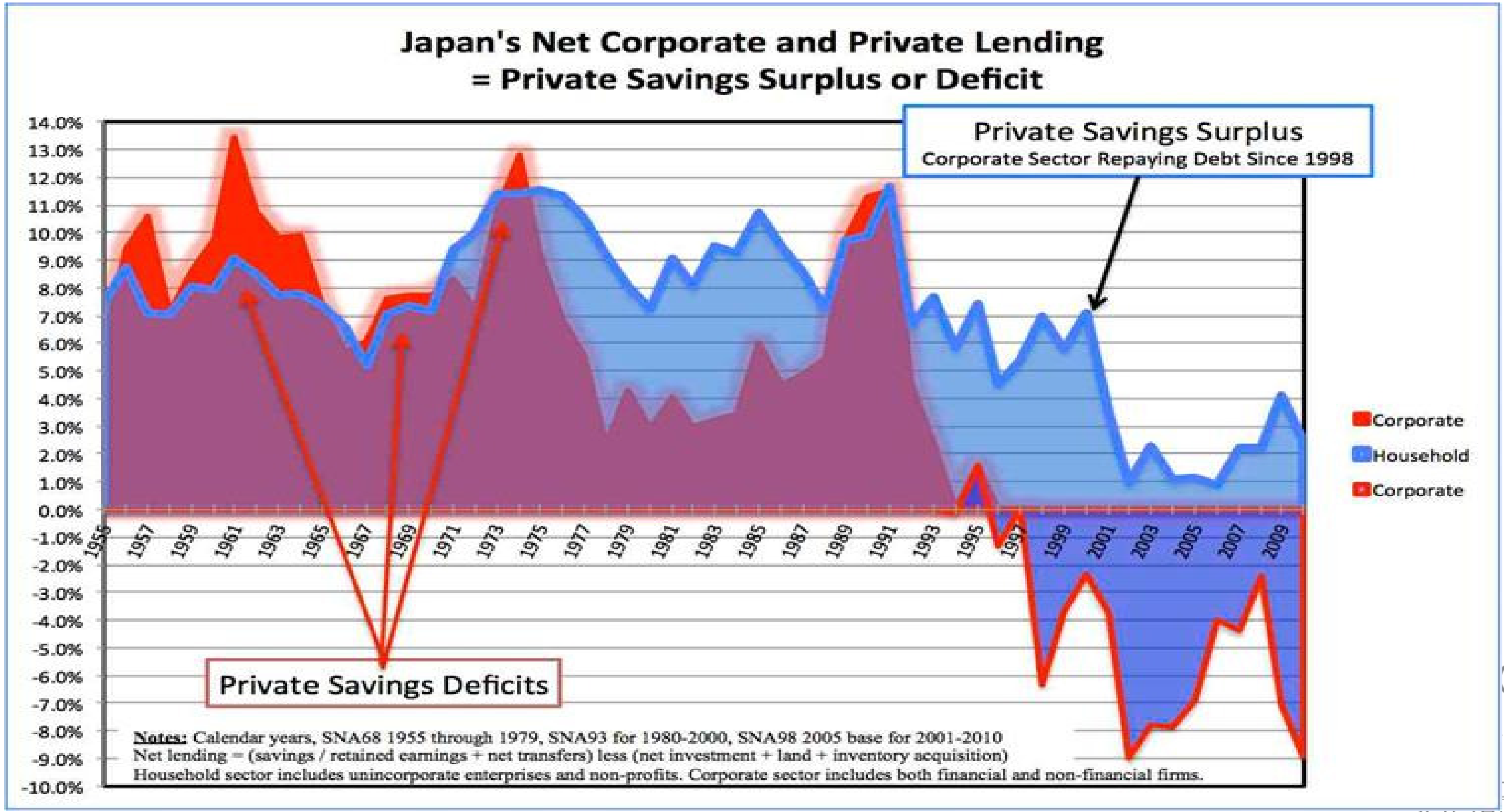
日仏財団
EHESS Paris
FONDATION
FRANCE-JAPON
DE L'EHESS

Total Debt in Selected Countries Around the World (source: McKinsey, 2012)

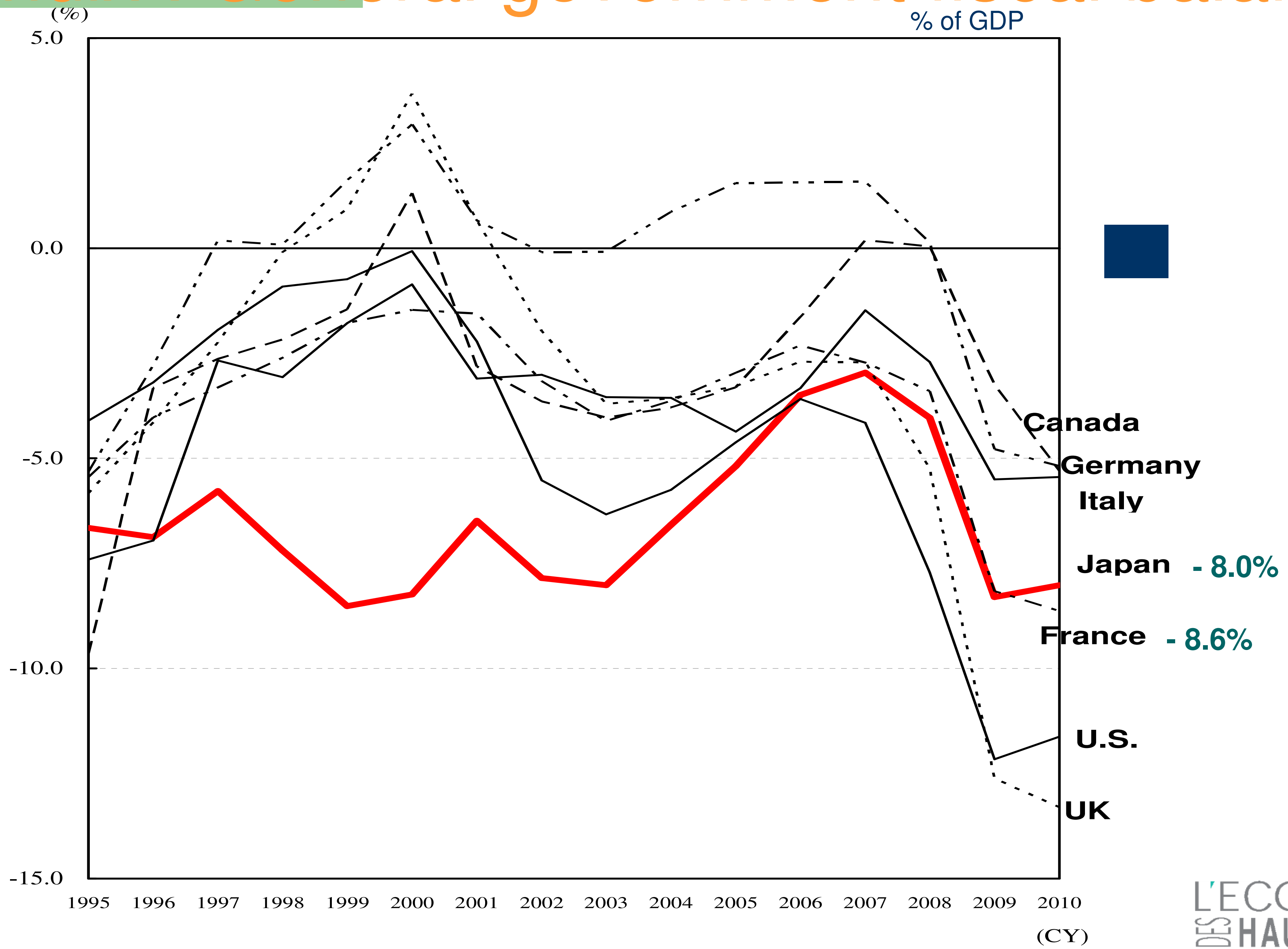


ETUDES
SCIENCES
SOCIALES

Appendix: Private savings surplus or deficit (source: McKinsey)

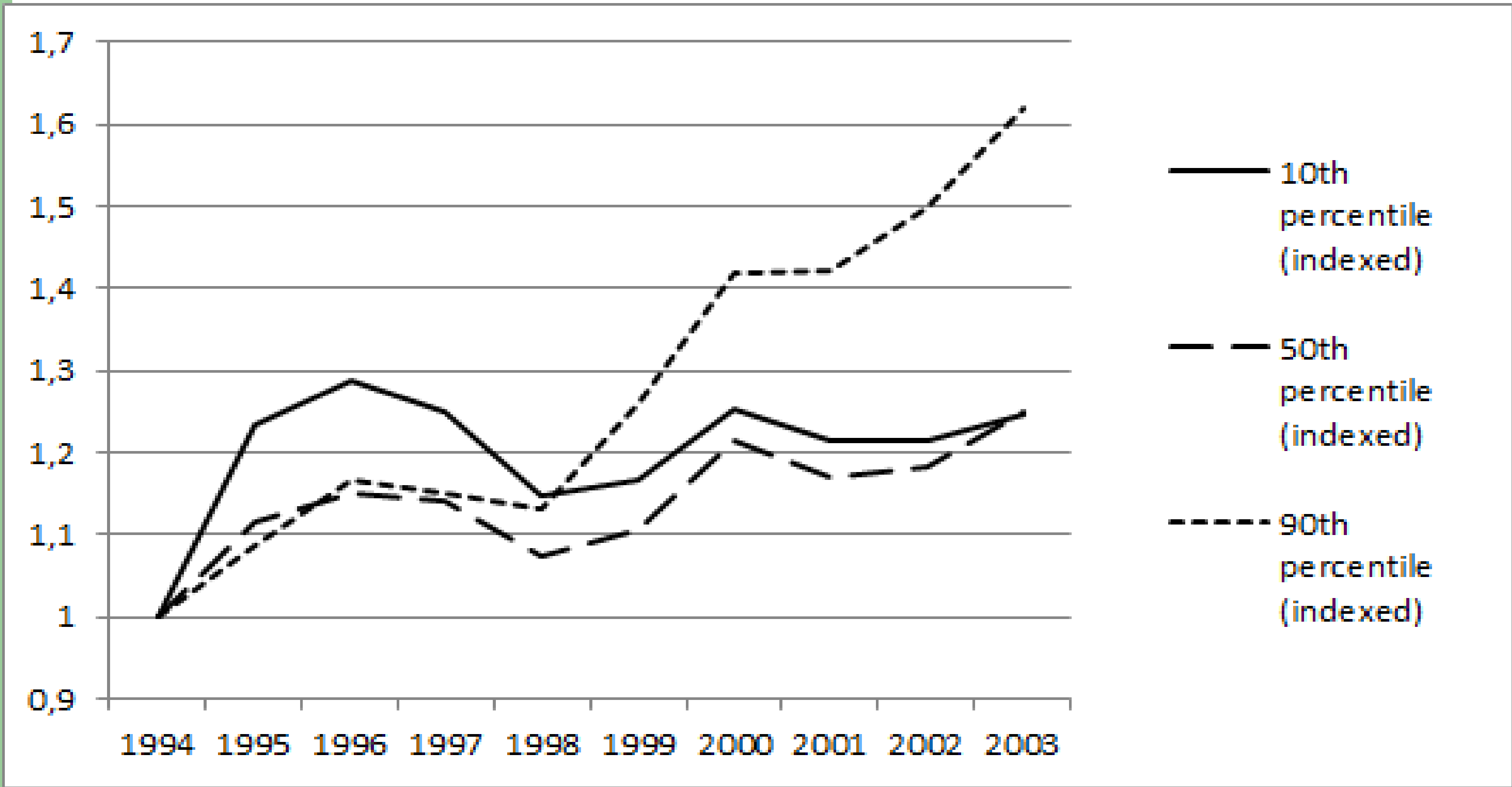


Appendix : General government fiscal balances



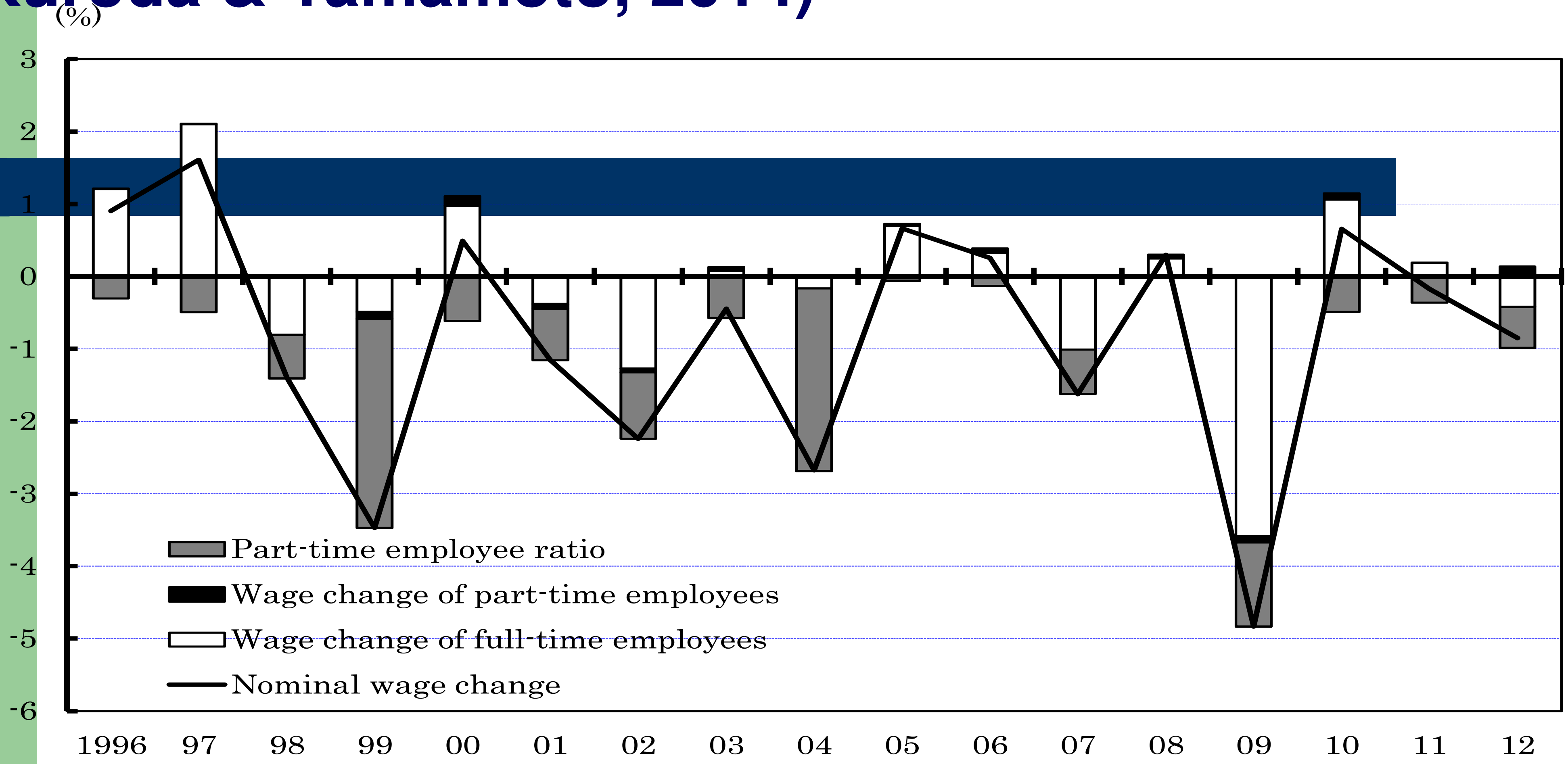
(Note 1) FY2010 budget is not reflected in the above data.
(Note 2) Figures for Japan are adjusted to exclude special factors.
(Source) OECD "Economic Outlook 86" (December, 2009)

Appendix: Evolution of the labor productivity dispersion in the manufacturing sector (Ito & Lechevalier, 2009; BSBSA, 10,000 firms)



日仏財団
EHESS Paris
FONDATION FRANCE-JAPON DE L'EHESS

Decomposition of changes in nominal wages in Japan (Kuroda & Yamamoto, 2014)



Source: Monthly Labour Survey (Ministry of Health, Labour and Welfare)

- ➔ **Increase of non-regular (part-time) worker pushed nominal wage downward.**
- ➔ **Regular (full-time) worker's wage also dropped since 98.**

L'ECOLE DES HAUTES ETUDES EN SCIENCES SOCIALES

Appendix: Labor market adjustments – diversity and inequalities

- **Increasing corporate diversity and labor adjustment**: Lechevalier et al. (2013) shows a slower adjustment (speed of downsizing: from 0.245 in the 1990s to 0.22 in the 2000s) but increasing dispersion of individual speeds (SD from 0.354 to 0.386 for a panel of 410 listed manuf. firms)
- **Rising wage inequalities**: to be connected to increasing firms' heterogeneity (Kalantzis et al., 2012); a peculiar form of labor market segmentation, which is superposed to intra firm dualism (e.g. regular vs. non regular workers)

Appendix: Implications for Europe

- Current situation in Europe: Negative domestic credit growth, Shrinking household income, **Corporations holding onto their cash**