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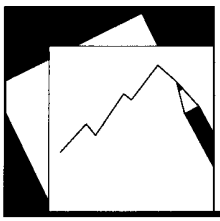

IMF Working Paper

Rebalancing in Japan: The Role of Private Consumption

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Asia and Pacific Department

Rebalancing in Japan: The Role of Private Consumption

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Abstract

Boosting growth through rebalancing is critical for addressing pressures from Japan's aging population. This paper focuses on one important untapped source of growth—private consumption, and argues that the key to reviving consumption is boosting household disposable income through higher wages, especially in services, and higher property income. The paper also suggests that the impact of higher property income on consumption could be potentially large.

JEL Classification Numbers: D12, E21

Keywords: Rebalancing, Private consumption, Disposable income, Property income

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I. INTRODUCTION

1. **Boosting growth is critical for addressing pressures from Japan's aging population.** Japan has one of the fastest aging population, with the elderly population ratio (age 65 or over) having doubled to 20 percent over the past 20 years. This trend will continue to create pressures for social security spending. At the same time, Japan faces the need to bring down its public debt ratio, which is one of the highest among advanced economies. To address these two challenges, higher growth is essential.

2. **This paper focuses on one important untapped source of growth—private consumption.** Private consumption is the largest component in GDP, but its growth has stagnated since the late 1990s. The paper argues that the key to reviving consumption is boosting household disposable income through higher wages, especially in services, and higher property income, and that the impact of higher property income on consumption could be potentially large. This paper is structured as follows. The next section reviews recent developments with private consumption, and Section III describes measures taken to boost consumption. Section IV examines key drivers of private consumption—wage and property income, and pays special attention to property income by examining household level micro panel data. Section V discusses possible policy options, followed by the conclusion.

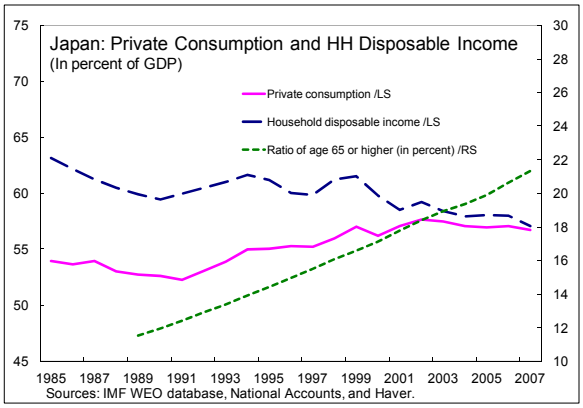
II. RECENT DEVELOPMENTS WITH PRIVATE CONSUMPTION

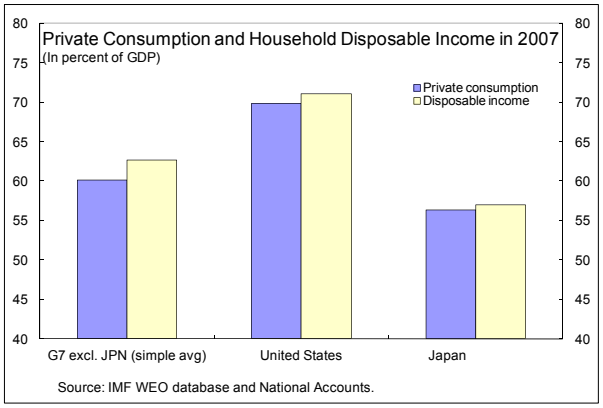
3. **Despite the rise during the 1990s, Japan's private consumption share in GDP is low relative to other G-7 countries.** The private consumption share rose continuously during the 1990s, reflecting population aging and policy measures. After peaking around 57 percent in 2002, the consumption share in GDP fell slightly during the recent expansion phase (2003–07), with consumption growing at 5 percent compared to 10 percent for GDP. As of 2007, despite having the highest elderly ratio among G-7 countries, Japan's consumption share was 4 percentage points below that of other G-7 countries (Figure 1).[1] [2]

[1] Estimates from Japan's time series regressions suggest that Japan' consumption share would be 1 percentage point lower if its elderly population ratio were at the G-7 (excluding Japan) average.

[2] Note, however, that the consumption share depends also on future demographic structure. For example, if Japan will continue to experience faster aging than other economies, it may need to save more now, leading to a lower current consumption share.

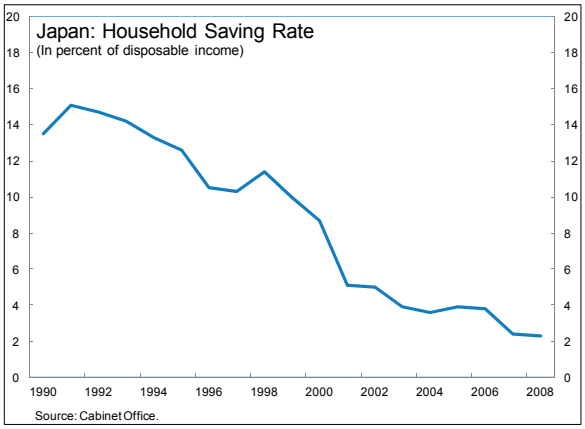
Figure 1. Private Consumption and Household Disposable Income

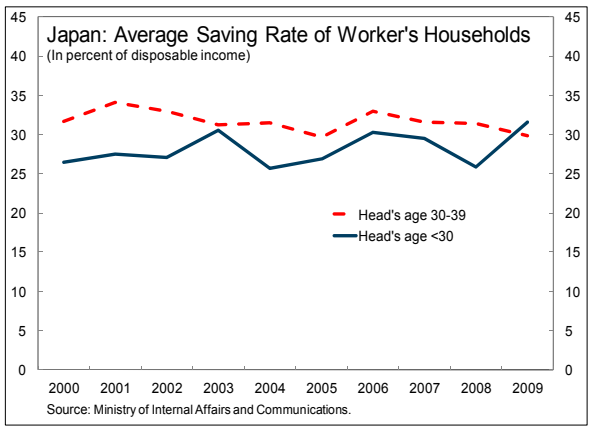




4. **Sluggish consumption in recent years is not the result of rising household savings, but reflects stagnant household disposable income.** The (aggregate) household saving rate has declined steadily since the early 1990s to around 2 percent in 2008 (Figure 2), mainly due to population aging. Even for younger households, who might be expected to save more with a weak economy, saving has not increased since the early 2000s (the saving rates for those 30–39 years of age and below have remained stable). On the other hand, private consumption has been closely tracking trends in household disposable income (Figure 1). These figures imply that not saving, but disposable income is the key factor behind the stagnant consumption.

Figure 2. Household Saving Rate





5. **Indeed, standard time series regressions confirm that at the aggregate level, Japan's private consumption (share) is positively related to household disposable income and the elderly ratio** (Table 1). The positive coefficient on the elderly ratio is consistent with a prediction of a standard life-cycle model. In the regressions, output gap,[3] the short-term interest rate, and CPI inflation are included as control variables (the latter two are in an alternative specification (second column in Table 1)). Similar to Japan's time series regression, the results for a G-7 panel regression also find a significant positive impact of household disposable income on consumption.

Table 1. Japan: Aggregate Regression Results [1, 2/]

	Japan 3/			G-7 Panel 4/	
Dependent variable: Private consumption (in percent of GDP)					
Household disposable income (in percent of GDP)	0.288**	0.276**	0.232	0.284***	0.282***
	(0.136)	(0.123)	(0.150)	(0.0649)	(0.0675)
Ratio of age 65 or higher (in percent of total population)	0.559***	0.539***	0.507***	-0.0729	-0.0728
	(0.0676)	(0.0912)	(0.111)	(0.233)	(0.235)
Output gap	-0.237***	-0.265***	-0.256***	-0.117**	-0.123**
	(0.0747)	(0.0676)	(0.0712)	(0.0531)	(0.0587)
Short-term interest rate		0.105	0.0987		0.0163
		(0.0917)	(0.0940)		(0.0473)
CPI inflation		-0.263**	-0.272**		-0.0111
		(0.0942)	(0.0973)		(0.0613)
Household net worth (in percent of GDP)			-0.00181		
			(0.00334)		
Year dummy	No	No	No	Yes	Yes
Num of Observations	26	26	26	134	134
R^2	0.924	0.949	0.950	0.470	0.470

Sources: OECD, IMF WEO database, and National Accounts.

1/ Standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.

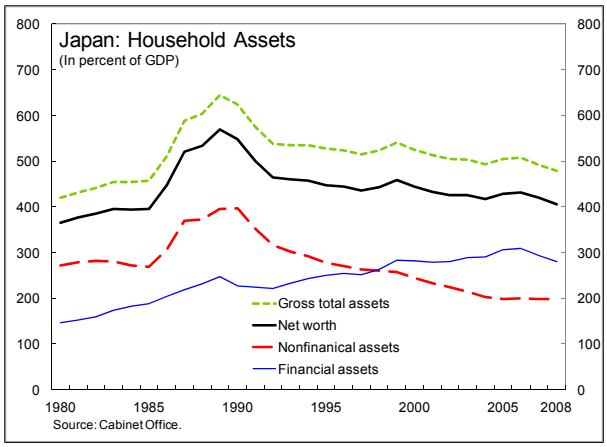
2/ The sample period is 1980-2005 except for missing observations.

3/ Regression with level variables.

4/ G-7 panel regressions are conducted by taking first differences to control for country-specific fixed effects and potential unstationarity.

[3] According to a standard representative agent model, consumption (level) responds only modestly to output gap (level) because a temporary shift in output has a limited impact on lifetime income that determines consumption. Such a response implies a negative correlation between the consumption share in GDP and output gap.

6. **At the same time, wealth effects may have contributed to sluggish consumption, although the empirical evidence is lacking.** Since the collapse of the asset bubble, household assets (in percent of GDP) have been falling, driven by continuous land price declines. That said, a time series regression fails to identify wealth effects on the consumption share. The coefficient on household net worth is negative and insignificant (third column of Table 1). This may be because household net worth is picking up business cycles, which are unlikely to be fully controlled by standard explanatory variables.



III. Policy Attempts to Boost Consumption

7. **Raising private consumption, and more generally, domestic demand has been a long-standing policy challenge in Japan**. Policy discussions on lifting domestic demand started in earnest in the 1980s, when reducing Japan's persistent and large trade surpluses became a global issue. Unlike today, the main purpose of expanding Japan's domestic demand was to achieve more balanced global growth rather than to boost Japan's own growth. Japan's key commitments in the late 1980s include:

- ***Plaza Accord (1985).*** At a G-5 meeting, Japan committed to opening up markets to overseas and implementing deregulation measures to stimulate domestic demand, while the G-5 economies agreed that some further appreciation of the yen would be desirable for adjusting global external imbalances.

- ***Maekawa Report (1986).*** Along the spirits of the Plaza Accord, a Japanese government council compiled the so-called "Maekawa Report"—one of the most influential post-WWII growth strategies for Japan. The report identified reducing Japan's large current account surpluses through expanding domestic demand and increasing imports as a key goal. Specific measures to achieve this goal included personal income tax cuts, development of the services sector, deregulation, and flexible fiscal and monetary policies (Box 1).

- ***Louvre Accord (1987).*** Japan agreed with other G-6 economies (including Canada) that it would stimulate domestic demand with flexible fiscal and monetary policies.

BOX 1. SUMMARY OF MAEKAWA REPORT (1986)

Key goal

- Reduce Japan's current account surpluses through expanding domestic demand and thus increasing imports.

Key policy areas

- Boost domestic demand:
  - Implement income tax cuts to support household disposable income;
  - Reduce working hours in the banking and public sectors to relax time constraint on spending (for example, increase the number of holidays to two per week from one);
  - Facilitate housing investment by preferential tax treatment; and
  - Increase public investment (by local governments) to stimulate domestic demand.
- Transform the industrial structure:
  - Develop the services sector to absorb diversified consumption demand ;
  - Facilitate inward FDI; and
  - Expand agricultural imports.
- Improve market access and increase imports:
  - Implement regulatory reform (for example, in the retail sector).
- Liberalize financial markets (for example, to diversity financial investment opportunities).
- Implement flexible fiscal and monetary policies to support domestic demand.

8. **Japan has implemented a large part of the policies in the "Maekawa Report" and the Louvre Accord, focusing on financial liberalization, deregulation, and supportive macro policies.** The government also continued to implement structural reforms throughout the past two decades, including under the Koizumi administration (2001–06). Specific measures implemented by the government include:

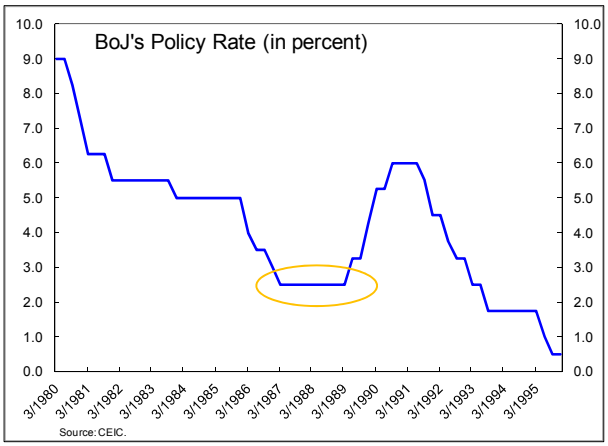
- *Structural measures.* The banking sector undertook major liberalization ("Financial Big Bang") in the late 1990s, by lowering business barriers between financial segments (for example, banks, security firms) and relaxing regulations on financial transactions such as retail purchases of foreign currencies and trusts.[4] In addition, to

[4] See, for example, Walker (2005) for details about financial liberalization starting in the late 1990s.

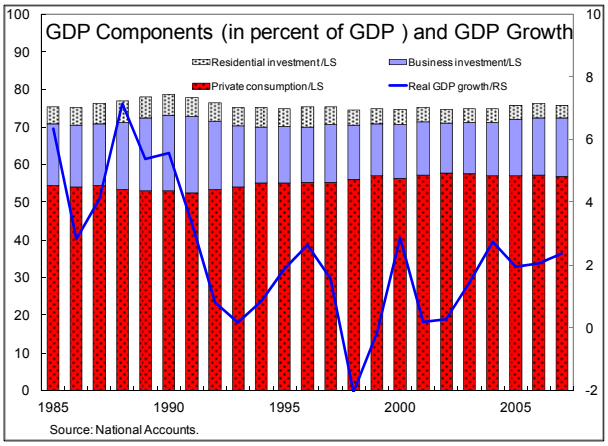
develop the services sector and open up markets, the government implemented regulatory reforms since the late 1980s in a broad range of areas such as the retail, transportation, telecom, and utility sectors (for example, lowering entry barriers, privatizing public corporations). A notable example of regulatory reforms in the services sector was the relaxation of entry barriers to large-scale retailers in the early 1990s, which contributed to expansion of their chains across Japan. Increasing the number of holidays to two per week (from one) in large companies and the public sector also contributed to reducing (average) working hours from 2,100 hours per year in the 1980s to around 1,800 hours, perhaps helping relax the time constraint on household spending.[5] On the other hand, progress appears to have been limited in other areas, for example, inward FDI that remains sluggish.

- *Fiscal policy.* The government implemented a series of income tax cuts to support household disposable income, with the personal income tax revenue declining by 1 percentage point of GDP between 1985 and 1995 and further income tax cuts in the late 1990s. At the same time, the central and local governments expanded public investment by 40 percent (in nominal terms) between 1985 and 1990 to stimulate domestic demand.

- *Monetary policy.* Following the Louvre Accord, the BoJ lowered its policy rate to 2.5 percent in February 1987 and maintained that low level until May 1989.



9. **These measures boosted domestic demand and helped to turn around the consumption share in the early 1990s.** Expansionary fiscal policy and accommodative monetary policy in the late 1980s did lift domestic demand by spurring residential and business investment, leading to average real GDP growth of around 5 percent between 1986–90. Meanwhile, private consumption growth lagged behind overall GDP growth, with the consumption



[5] 1,800 hours was a target set by a follow-up report to the "Maekawa Report" (issued in 1987).

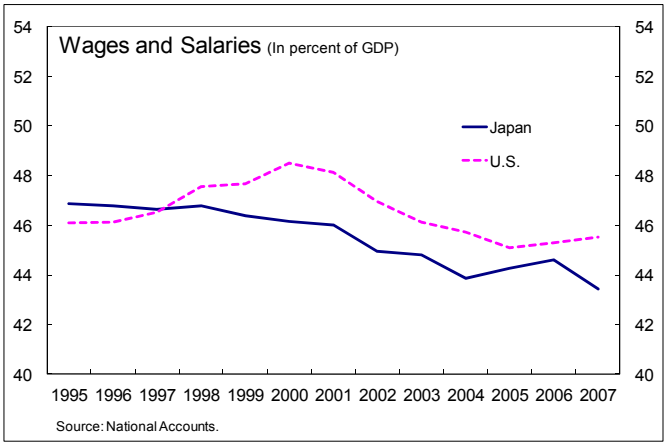
share in GDP declining during the 1980s. This trend was reversed in the early 1990s, and the consumption share rose from 52 percent of GDP in 1991 to 57 percent in the early 2000s. The structural policy measures (above) likely have contributed to this increase, but the sharp rise in the elderly ratio during this period also played a role (as the results in Table 1 suggest).

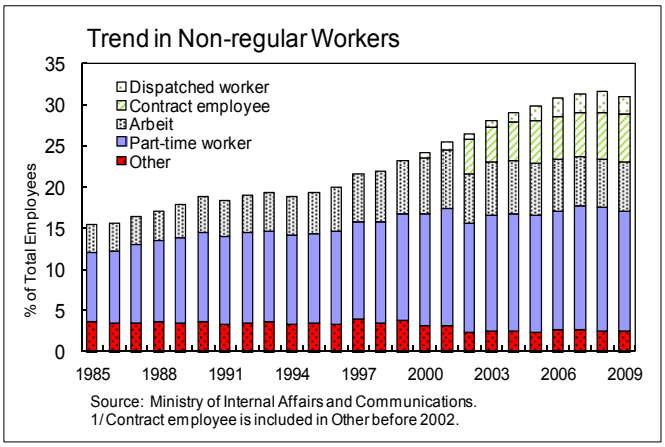
IV. Main Drivers of Private Consumption

10. **The main components of household disposable income—wages and property income[6]—have stagnated in Japan.** Wages declined by 3 percent between 2000–07 in nominal terms, while household property income fell 14 percent during this period. Support from credit and equity financing was also limited.

Developments in wages

11. **Sluggish wages reflect both global and Japan-specific factors.** The share of wages in GDP has fallen from 47 percent in 1995 to 44 percent in 2007. The key global factors may include technological changes, such as greater use of information technology that reduce demand for low-skilled workers, and globalization pressures that push firms to be more sensitive to international wages.[7] The significantly lower productivity growth in the services sector relative to the manufacturing sector in Japan may also have depressed overall wage growth, given productivity's link to wages.[8]





12. **The increasing share of nonregular workers also may have played a role in depressing wages.** Deregulation measures in the 1990s that expanded the list of industries

[6] Property income is defined as income from financial and nonfinancial assets (e.g., interest income, dividends, rent).

[7] See, for example, Sommer (2009) for detailed discussions.

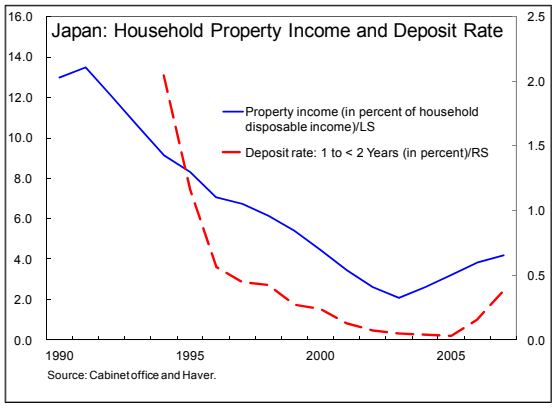
[8] Morikawa (2006) presents evidence that productivity growth in the manufacturing sector has tended to be higher than that in the services sector across advanced economies.

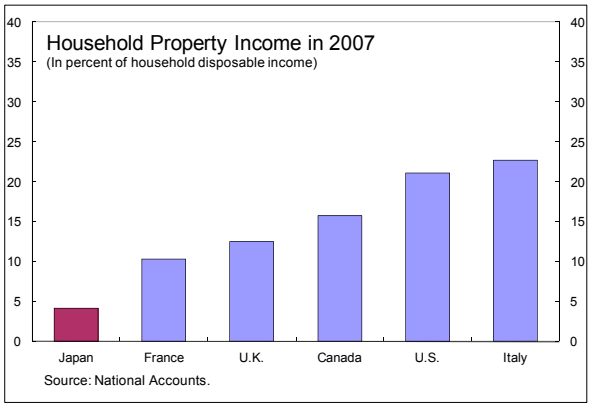
contributed to an increase in the share of nonregular workers to 30 percent in 2009 from 15 percent in 1995. This may have put downward pressures on aggregate wages and increased job uncertainty. In addition, strong employment protection for regular workers may have limited competition and productivity growth, holding back wages. (See Sommer (2009) for more detailed discussions.)

Developments in property income

13. **After Japan's asset bubble collapse around 1990, household property income steadily declined (Figure 3).** The declining share of household property income was led by the fall in both interest and dividend income following the economic slump of the 1990s. Household property income recovered in the early 2000s along with the economic rebound, but remained low at only about 4 percent of household disposable income in 2007, compared with 20 percent in the United States (U.S.) and well below that of other G-7 economies.

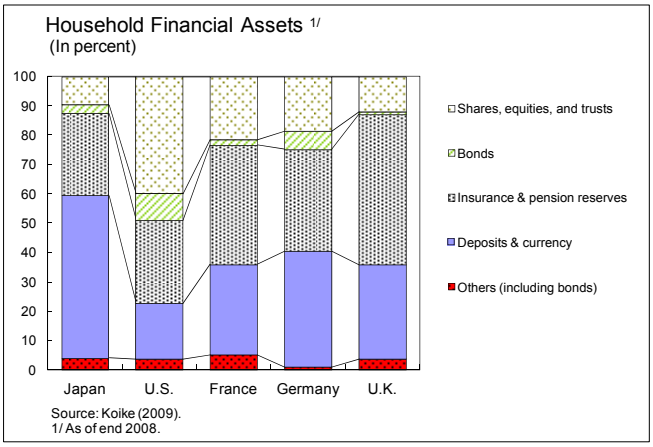
Figure 3. Household Property Income





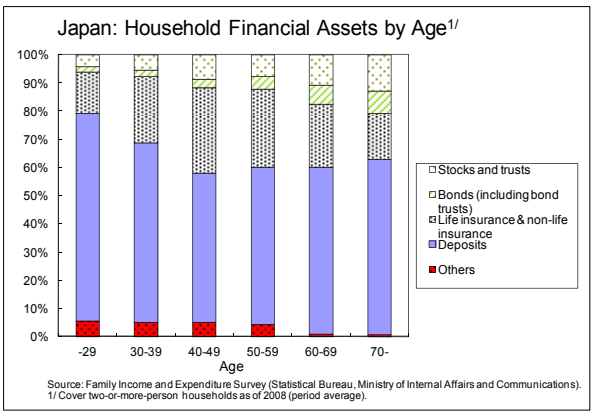
Why has household property income been so weak?

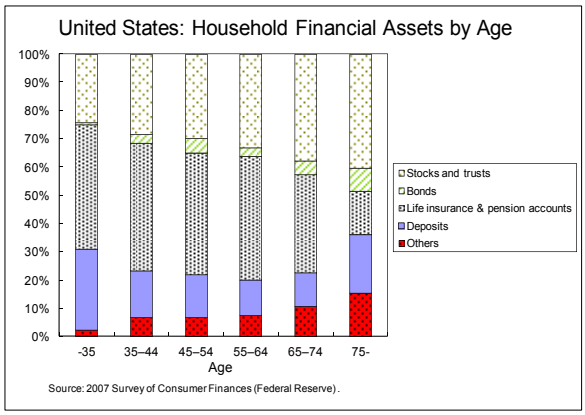
14. **A key reason for low household property income in Japan is the small share of risky assets in household's balance sheets.** At the aggregate level, risky assets (shares, equities, and trusts) account for only 10 percent of the overall financial assets in Japan—significantly lower than the 40 percent share in the U.S. Micro data point to a similar pattern, with households in the U.S. holding more risky assets than in Japan at all ages (Figure 4). In Japan, the high share of deposits and currency, which account for nearly 60 percent of financial assets and earn a



low rate of returns over the past decade (typically less than 0.5 percent), have depressed property income.

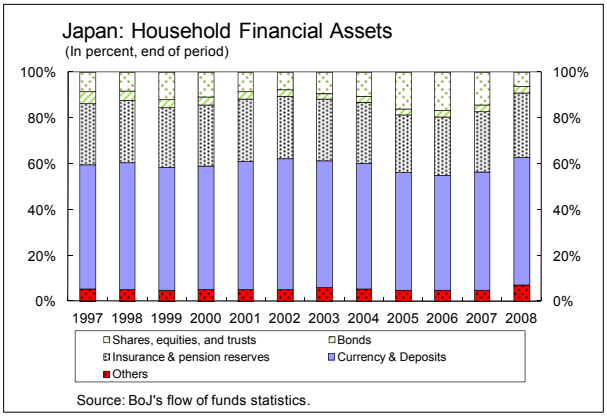
Figure 4. Household Financial Assets: Japan and U.S.





15. **In Japan, the low share of risky assets may be attributed to regulatory, economic, and social factors.**[9]

- *Past financial regulations*. Until the late 1990s, relatively tight restrictions on investments in risky assets, such as on foreign currency deposits,[10] likely discouraged households from investing in such assets. Even when most regulatory impediments to holding risky assets were removed in the wake of the "Financial Big Bang" in 1998, households' risk appetite increased only slightly. Moderate adjustment costs, including high fees, for example, on trusts (Faulkner-MacDonagh and Nakagawa, 2007), were also responsible for the slow portfolio shifts, leaving the share of risky assets at a low level.

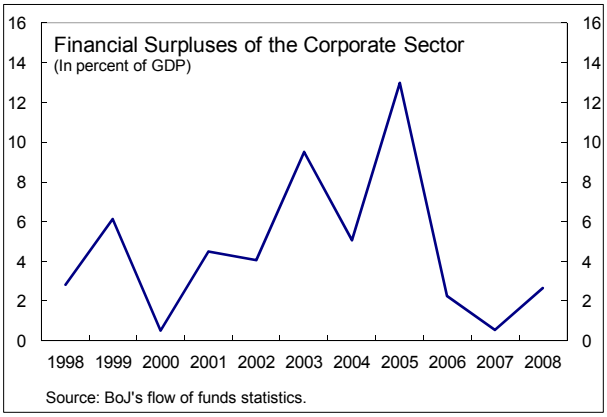


- *Lower stock returns.* Lower stock returns, compounded by smaller dividend payouts, have not only been a drag on property income, but may also have

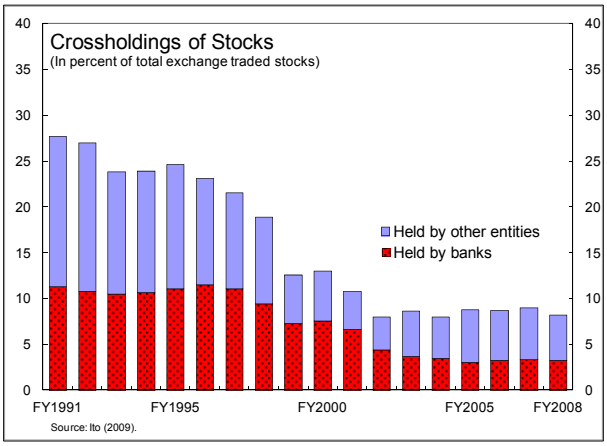
[9] In addition to the factors listed here, Matsuura and Shiraishi (2004) argue that the age-based remuneration system, which is prevalent in Japan, could reduce holdings of risky assets. Under this system, young employees receive lower wages relative to their performance, leaving their future wages as effectively risky financial assets. These assets are subject to the uncertainty surrounding the lifetime employment system, which could encourage young workers to hold disproportionally more safe assets.

[10] Until the late 1990s, commercial banks were not allowed to provide trusts or foreign currency deposits to households.

depressed demand for stocks and trusts. Dividend payments in Japan are particularly small by international standards (Figure 5), with stock dividend yields remaining lower than 10-year JGB yields throughout the 2000s.[11] Even during the boom years between 2003 and 2007 when corporate profits were substantial, dividend payouts were only 2½ percent of GDP, compared to 5–10 percent of GDP in other G-5 economies. During this period, corporates were either retaining a large part of their profits as cash (deposits) or using them to pay down debt, resulting in record high financial surpluses.



Right before the global financial crisis (in 2007), the dividend payout ratio of nonfinancial corporations rose to about 15 percent, but was still well below the G-7 average (50 percent).[12] The low ratio could partly be attributed to the large crossholdings of stocks, which reduces pressure on companies to issue dividends.[13] However, over the past 20 years, Japanese banks and nonfinancial corporations have been unwinding the crossholdings, possibly leading to a continued pickup in the payout ratio going forward.

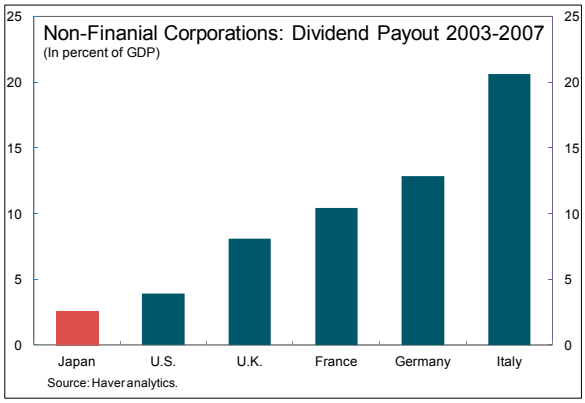


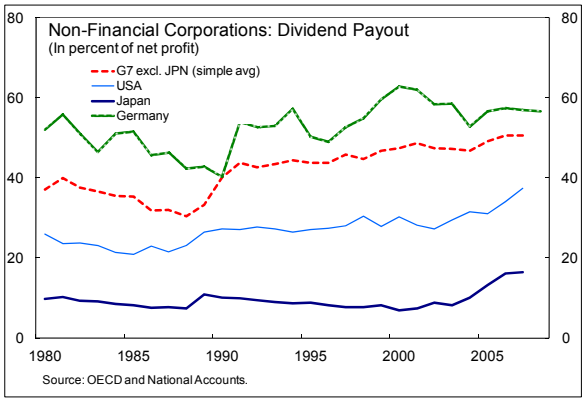
[11] Stock returns including capital gains have been generally lower than 10-year JGB yields throughout the post-bubble period (Matsuura and Shiraishi, 2004).

[12] Following the global financial crisis, the dividend payout ratio rose further in Japan. However, this largely reflects the fact that in Japan, many corporates pay out a fixed amount dividends even if profits are squeezed (as happened following the global financial crisis). The dividend payout ratio will likely fall once profits recover to a normal or pre-crisis level.

[13] Historically, the large crossholdings may have been easing pressures against corporates to enhance their profitability and pay out more of their profits.

Figure 5. Corporate Dividend Payout





- *Expensive housing*. Historically, housing prices have been higher in Japan than in advanced economies, perhaps discouraging investments in risky financial assets with housing as a close substitute.[14] Housing assets were nearly 300 percent of household disposable income in Japan in 2000, compared to about 150 percent in the U.S. (Babeau and Sbano, 2003). Expensive and risky housing purchases may have encouraged Japanese homeowners to accumulate more safe liquid assets to balance their overall asset portfolio. Expensive houses may also have forced young households to increase cash and deposit saving more aggressively to finance large initial down payments. The observation that households in Japan start to increase their share of risky assets (stocks and trusts) at a later stage in life than in the U.S. (Figure 4) is consistent with these arguments.
- *Preferences*. Although it is hard to formally test preferences, survey results suggest that Japanese households are more risk-averse than those in the U.S.[15] The collapse of the bubble in the early 1990s may have changed households' perceptions about stocks and strengthened risk aversion among Japanese households,[16] partly offsetting the impact of financial deregulation.

[14] See, for example, Iwaisako (2003).

[15] According to Nakagawa and Shimizu (2000), the percentage of Japanese households that consider safety in financial investment to be of the utmost importance is as high as 44 percent—more than 15 percentage points higher than households in the United States.

[16] Using the U.S. data, Malmendier and Nagel (2009) find evidence for the idea (originally suggested by Ameriks and Zeldes, 2004) that those who have experienced lower stock returns in their lifetime are less likely to hold stocks.

Does household property income affect private consumption?

16. **One might argue that household property income is not a particularly important determinant to aggregate private consumption.** This is because holdings of assets (that generate property income) are concentrated among the rich whose marginal (and average) propensity to consume may be lower than that of the rest of the population. To investigate this possibility, this subsection conducts regressions relying on household level micro panel data.[17]

17. Specifically, this paper uses the Japanese Panel Survey of Consumers (JPSC)[18] and estimates the following linear Euler equation:[19]

$$\Delta C_{i,t} = \beta_0 + \beta_1 \Delta P_{i,t-1} + \beta_2 Z_{i,t} + \varepsilon_{i,t},$$

where $\Delta C_{i,t}$ is the year-on-year change in consumption in September in year t (in percent), $\Delta P_{i,t-1}$ is the annual change in property income in year $t-1$ in percent of total income, and $Z_{i,t}$ is a vector of standard control variables.[20] β_1 is zero if property income does not affect consumption. Note that the main independent variable is the *lagged* change in property income ($\Delta P_{i,t-1}$).[21] The lagged change in property income may have good predictive power for current consumption growth both because consumption response to income changes may be sluggish (for example, due to habits) and because in the JPSC, part of $P_{i,t-1}$—more specifically, property income during the fourth quarter (October-December) of year $t-1$—was earned after $C_{i,t-1}$ was realized (Figure 6).

[17] Alternatively, one could use aggregate data, but they tend to produce a negative association between growth rates of private consumption and household property income in Japan (which is counterintuitive) partly because business cycles cannot be fully controlled for due to lack of good instruments.

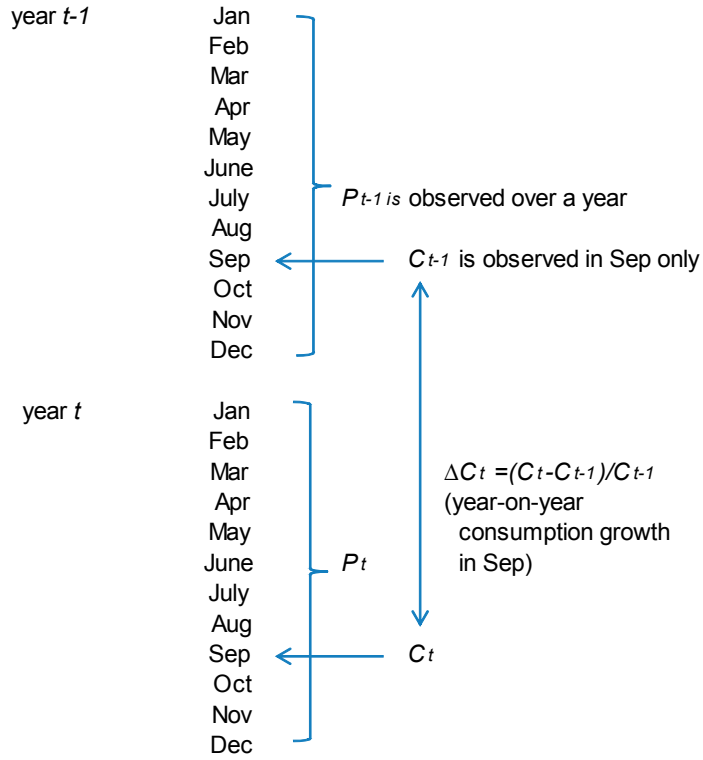
[18] The JPSC is provided by the Institute for Research on Household Economics.

[19] A similar form of equation has been typically estimated to test excess sensitivity of consumption growth to known or expected changes in income (e.g., Parker (1999)).

[20] Control variables are the household head's age, age squared, the number of family members, education dummies, occupation dummies, industry dummies, and time dummies. The intention of their inclusion is to control for unobservable factors including preferences and household/age specific interest rates.

[21] An alternative approach could be to use the current change as the main independent variable. A technical problem with this approach is that the current change would need to be instrumented for by the two year lag ($\Delta P_{i,t-2}$) to avoid the aggregation problem (Working, 1960), but the two year lag is not a strong enough instrument.

Figure 6. Timing of Variable Observation



18. **Estimation results are not necessarily robust but are consistent with the hypothesis that higher property income supports private consumption.** The coefficients on the lagged change in property income in total income are in the range of 0.1–0.2 (Table 2), which means that marginal propensity to consume (MPC) from property income is approximately 10–20 percent (given that household consumption is over 90 percent of household total income).[22] The likely unbiased instrumental variable (IV) coefficients, estimated by using $\Delta P_{i,t-2}$ as the instrument, are insignificant, but higher than the OLS estimates, suggesting that the statistically significant OLS coefficients (around 0.1) could be interpreted as the lower bound of the estimates. That said, the estimates require careful interpretation as the econometric model cannot distinguish temporary changes in property income from permanent changes. The estimated MPCs are likely to be higher than MPC from a temporary increase in property income, but lower than that from a permanent increase.

[22] However, since the lagged change in property income may also have lifted $C_{i,t-1}$ and thus reduced $\Delta C_{i,t}$, the estimate may be understating the true MPC.

Table 2. Japan: Household Panel Regression Results 1,2/

	OLS		IV	
Dependent variable: Change in consumption (in percent) 3/				
Lagged change in property income 3/ (In percent of total income)	0.11**	0.11**	0.23	0.24
	(0.050)	(0.051)	(0.22)	(0.22)
Year dummy	Yes	Yes	Yes	Yes
Other control variables	No	Yes	No	Yes
Num of Observations 4/	10906	10906	8748	8748
R^2	0.003	0.005	0.002	0.004

Sources: Japanese Panel Survey of Consumers.
1/ Serial correlation heteroskedasticity robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1.
2/ The sample period is 1993-2006.
3/ Consumption and income are converted into real terms by GDP deflator.
4/ Restricted the sample to married households and households whose head's age is between 21-60. Top and bottom 1% of the dependent variables are trimmed.

19. **These estimates suggest that room for boosting private consumption through higher property income could be potentially large.** If household property income could rise to the U.S. level in 2007 (14 percent of GDP) through higher investment returns and a higher share of risky assets in the household asset portfolio, GDP could increase by at least 1–2 percentage points assuming MPC of 10–20 percent from household property income (estimated above).[23] [24] The increase in the stock dividend payout to the 2007 G-7 average (in other words, tripled from Japan's 2007 level) alone could produce half of this impact (0.5–1 percentage point), pointing to potentially large impact of higher property income on private consumption.

Debt or equity financing

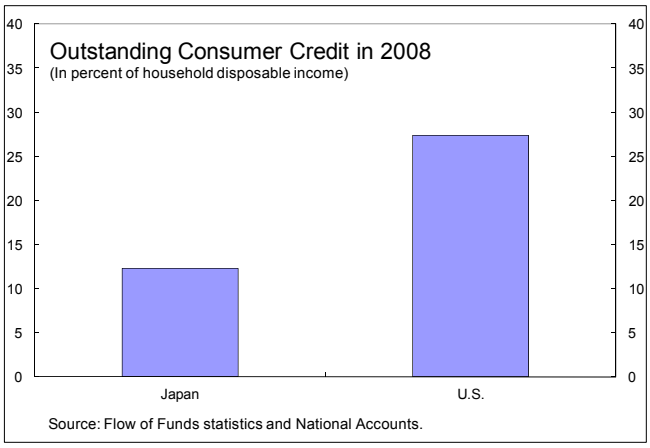
20. **Japanese households have not been actively engaged in debt or equity financing to support spending.** Sluggish debt or equity financing has reflected largely the declines in land and stock prices since the early 1990. Other possible key reasons include:

- *Consumer credit* in Japan is smaller than in the U.S. (10 percent of GDP and 25 percent of GDP, respectively). In addition, the distribution of credit availability in Japan is

[23] Under the assumption that corporate profits (in percent of GDP) will eventually return to pre-crisis levels.

[24] A *permanent* rise in stock returns, if achieved, could have an even larger GDP impact because as noted earlier, the estimated MPC of 10–20 percent may be lower than MPC from a permanent increase in household property income.

concentrated among low-risk and high-risk borrowers, with limited credit extended in between—so called the "middle-risk" gap—who may benefit from the ability to smooth intertemporal consumption. This is partly due to the lack of a comprehensive credit information system for assessing credit risk, similar to the credit bureaus in the U.S. Other factors behind the limited consumer credit may include households' strong aversion to consumer credit and the stigma attached to borrowing from a consumer finance company. [25]



- *Reverse home mortgage* markets virtually do not exist in Japan, perhaps constraining the ability of the elderly to spend their housing capital gains. [26] [27] Starting in the 1980s, many local governments launched reverse home mortgages, but these failed to take hold. Lack of risk management mechanisms and illiquid markets for used housing have discouraged financial institutions from providing reverse home mortgages. On the borrowers' side, favorable tax treatment on land encourages the elderly to leave housing as a bequest in their wills instead of selling.[28] Another important factor is that few elderly people know about reverse home mortgages (only 20 percent in 2005, according to the Cabinet Office).

V. Policy Options and Implications

21. **Reviving private consumption will require a combination of reforms aimed at boosting wages, generating higher returns on savings, and improving household access to financing.** Possible measures include:

[25] Over-borrowing from consumer financing companies has been described as the "hell of consumer financing" (or "Sarakin Jigoku" (in Japanese)) and has long been an important social problem. In response, the government has passed legislation that caps interest rates and limits borrowing to one third annual income.

[26] A reverse home mortgage is a loan against housing equity. A resident does not have to repay the loan or move out of his home until he or she dies.

[27] By contrast, in the U.S., the number of new reverse home mortgage contracts under the public Home Equity Conversion Mortgage system has reached 100,000 a year, up from below 10,000 in 2000 (FHA Outlook, 2010).

[28] Some may argue that stronger bequest motives in Japan could prevent homeowners from applying for reverse home mortgages. However, empirical evidence suggests that bequest motives are weaker in Japan than in the U.S. (Horioka and others, 2001).

- **Boosting wage growth**

  - *Service productivity.* Accelerating labor productivity growth in the services sector, which has been lagging that in the manufacturing sector, would lift wages. While important regulatory reforms have been made in a number of areas in the services sector (as noted already), further reforms in still regulated areas, such as health care, could be pursued.

  - *Labor market reform.* Greater labor flexibility could lift wages through higher employment and productivity. One way would be to introduce a new regular contract with weaker employment protection that could encourage firms to hire more regular workers (IMF, 2010). This may not only give workers more incentives to accumulate human capital, helping raise productivity and returns, but also address concerns about equity between regular and nonregular workers. Such a contract would need to allow grandfathering of existing permanent contracts to mitigate uncertainty about employment prospects.

- **Raising stock returns and diversifying household portfolio**

  - *Stock returns.* Deregulations to raise productivity could strengthen firms' profitability and improve stock returns, stimulating demand for risky assets. Continued unwinding of cross-shareholdings could also encourage greater dividend payout and thus private consumption.[29]

  - *Incentives for holding non-deposit financial assets*, such as a reduced tax rate on dividend income, could be extended (currently, the tax rate on dividend income from listed stocks is reduced to 10 percent from 20 percent, but this is scheduled to be terminated at end-2011).

- **Improving access to credit or equity financing**

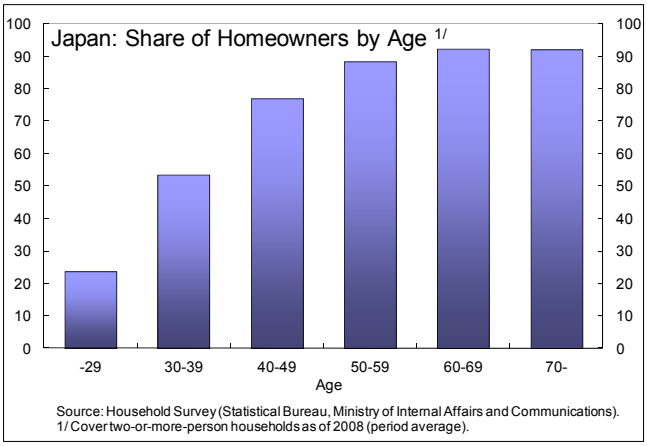
  - *Consumer credit*. Access to consumer credit could be improved through greater sharing of credit information between banks and non banks.[30] Since demand for consumer finance is concentrated among low-wealth households, the aggregate impact of relaxing their liquidity constraint or reducing precautionary savings, however, might be limited.

  - *Reverse home mortgages.* Given the rapid population aging, reverse home mortgages may have potential for stimulating consumption, as a larger fraction of the elderly are homeowners compared to the young. In light of significant risks

[29] Cross-shareholdings are being unwound particularly by banks that aim to reduce market risks.

[30] Under the revised Money Lending Act, credit information agencies (to which consumer finance companies report) have the obligation to share information on consumer credit with each other, but not to commercial banks.

for banks associated with providing reverse home mortgages, public assistance may be needed to jump-start this market, for example, by supplying insurance (to banks) through a government affiliated financial institution as done in the U.S. Deepening markets for used housing, including through developing a qualification system for housing that reduces the asymmetric information problem, help banks to more easily sell houses they accept.



22. **Finally, steps to strengthen the social security system would help reduce households' precautionary savings.** Murata (2003) provides evidence for the existence of precautionary savings that stem from concerns about future public pension benefits. Ongoing reforms to enhance the reliability of the public pension system and efforts to improve the government fiscal positions would lessen uncertainty about household's future income prospects.

VI. CONCLUSION

23. **For Japan, reforms to stimulate private consumption hold significant promise for lifting growth.** This could be achieved by boosting household disposable income through higher productivity growth and returns, combined with steps to facilitate shifts in household balance sheets. In particular, the impact of higher household property income on private consumption could potentially be large.

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