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Unstash the Cash! Corporate Governance Reform in Japan

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Abstract

Japan's high corporate savings might be holding back growth. We focus on the causes and consequences of the current corporate behavior and suggest options for reform. In particular, Japan's weak corporate governance—as measured by available indexes—might be contributing to high cash holdings. Our empirical analysis on a panel of Japanese firms confirms that improving corporate governance would help unlock corporate savings. The main policy implication of our analysis is that comprehensive corporate governance reform should be a key component of Japan's growth strategy.

JEL Classification Numbers: D22; G30;G34

Keywords: Japan; corporate cash holdings; corporate governance.

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I. INTRODUCTION

Japan's corporate sector stands out in terms of its high cash holdings compared to other advanced countries. While high firms' cash holdings play some positive roles, such as providing insurance against shocks, they also imply a high macroeconomic costs if they prevent resources from being used in a more efficient way. This is likely to be relevant in Japan, where high cash holdings coexist with a negative contribution of private investment to growth in the last few years and with falling real wages in the face of positive labor productivity growth for most of the last two decades. In this context, Japan's high cash holdings are likely to be holding back both potential and short term growth.

Given that holding large amounts of cash on their balance sheets—rather than investing or paying higher wages—might be rational for individual firms if they expect other firms to do the same, there seems to be space for policies to break this suboptimal equilibrium and encourage more risk taking in the corporate sector. Accordingly, this paper focuses on the causes and economic consequences of the current corporate behavior and suggests options for reform.

In addition to the determinants which have been highlighted in the previous literature on corporate cash holdings, several Japan-specific factors—including entrenched deflation expectations; aversion to bankruptcies and lack of pre-packaged bankruptcy procedures; takeover regulations and ownership structure; role of banks in financing firms; and weak corporate governance—might be encouraging Japanese firms to hold excessive cash on their balance sheets. In particular, a cross-country comparison of corporate governance indexes shows that Japan scores lower than other G-7 countries regarding firm-level governance attributes covering: board composition; audit quality; shareholder rights; and ownership structure and compensation. Since previous studies have shown that good corporate governance is a significant factor in reducing cash holdings, improving corporate governance could go a long way toward unlocking Japan's corporate savings.

The hypothesis of a relationship between improved corporate governance and reduced cash holdings in Japan is confirmed by our empirical analysis on a panel of about 3,400 Japanese firms. Our results suggest that improving corporate governance in Japan—proxied in the regression by an index summarizing company disclosure of governance data—could significantly reduce corporate cash holdings. In addition, we expect that corporate governance reform could have significant second round effects. By encouraging higher investment and nominal wages, such reforms would help Japan exit from deflation, which in turn would make holding cash on firms' balance sheets more costly, thus encouraging further corporate spending in a self-reinforcing virtuous circle.

The policy implications of our research are clear: comprehensive corporate governance reform should be an important component of the government's growth strategy. In this regard, recent steps taken by the authorities go in the right direction, including the

introduction of the Stewardship Code for institutional investors and plans to encourage the use of independent outside directors on a “comply or explain” basis. However, in light of our encouraging empirical results, we argue that reforms could be more ambitious. In this context, we propose and discuss some possible additional measures, including the adoption of a corporate governance code to complement the Stewardship code, and expanding the use of independent outside directors beyond current plans.

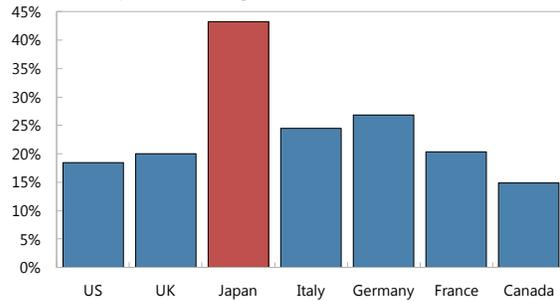
The structure of the paper is as follows. Section II presents some stylized facts regarding Japan’s high corporate cash holdings in an international perspective. Section III discusses the determinants of cash holdings, with special attention to Japan-specific factors. Section IV looks in detail at Japan’s corporate governance indicators from an international perspective. In Section V we present some empirical evidence based on a panel of Japanese firms, which confirms that improving corporate governance could reduce corporate cash holdings in Japan. Section VI discusses progress made in corporate governance reform in Japan so far and provides some policy recommendations. Section VII concludes.

II. CORPORATE JAPAN’S HIGH CASH HOLDINGS

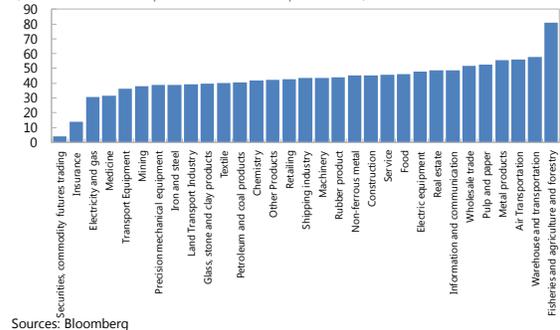
Cash holdings by Japanese companies are very high compared to other G-7 countries. As it can be seen in the text chart, the average ratio of cash and cash equivalent holdings to market capitalization of Japanese listed companies during 2004–12 was above 40 percent in Japan, compared to values in the 15–27 percent range in other G-7 countries.

Japan’s high cash holdings are not driven by a particular industrial sector but rather broad based. In theory, some sectors might face greater need to hold cash than others. However, in Japan, currently most sectors’ cash balances as percentage of their market capitalizations are higher than the G-7 average (excluding Japan and Italy) of 24 percent in 2012 and of 19 percent between 2000 and 2012, suggesting that Japan’s high cash balance phenomenon is not particularly driven by industry-specific factors (see text chart).

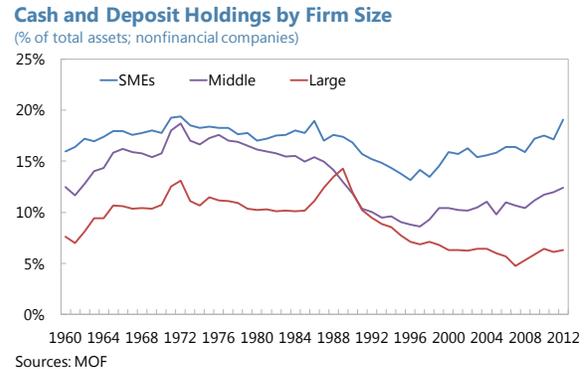
Listed Companies’ Cash and Cash Equivalents Holdings
(% of market capitalization; Average between 2004 and 2012)



Firms’ Cash Holdings by Sector 2013
(%; Cash and cash equivalent/Market Capitalization)



Small and medium enterprises (SMEs) have been the main contributors to high corporate cash balances, but more recently larger companies have also increased cash holdings. A Ministry of Finance's survey shows that SMEs have held over 15 percent of total assets as cash and deposits for most years since 1960, and more recently the share has been increasing to around 20 percent. SMEs' high cash holdings were coincident with high debt. Despite the trend of deleveraging across firms after the bubble burst in 1990s, SMEs rely more on borrowing from financial institutions than larger firms, while continuing to hoard cash. Furthermore, the post 2008 crisis trend suggests that larger companies, which had reduced cash holdings from their peak in the late 1980s, have also re-started accumulating cash (text chart).



The data discussed above suggest that Japan's corporate cash holdings might be excessive and not justified by economic fundamentals. This is consistent with the results of Ivanova and Raeli (2014) who find that Japanese firms have exhibited an excessive increase in cash holdings in recent years compared to what a standard model of corporate demand for cash would imply. Such excessive corporate savings are likely to be detrimental for the economy. Japan's corporations' preferences for holding a large amount of cash might be preventing them from increasing wages and investment, thus holding back both aggregate demand and potential growth. This view is consistent with the results of Shinada (2012), who uses Japanese firm-level data for 1980–2010 to analyze the impact of cash holdings on business performance. His results suggests that firms' conservative cash management regardless of large investment opportunities increases "side-line" cash, and firms cannot fully utilize investment opportunities to maximize their return on assets. Given the macro-relevance of excessive corporate cash holdings, this paper looks at their determinants and provides some policy recommendations to reduce them.

III. DETERMINANTS OF CASH HOLDINGS

The literature has highlighted various determinants of firms' cash holdings, but there is no overwhelming support for a unified theory. In the early literature, transaction costs were considered as the main determinants of cash levels, and firms with higher marginal costs of cash shortfalls were expected to have higher cash holdings (Miller and Orr 1966; Meltzer 1993; Mulligan 1997). Opler et al. (1999) find empirical support for the trade-off theory, which suggests that firms consider not only the costs but also the benefits of holding cash to derive optimal cash levels. Under this theory, firms tend to hold more cash when they are smaller, when they have more volatile cash flows, and invest more. In addition, the trade-off theory incorporates the effect of agency problems between shareholders and managers, as they tend to view the costs and benefits of cash holdings differently. An alternative theory

considered by Opler et al. (1999), for which they also find some support in their analysis, is the financing hierarchy theory, under which there is no optimal amount of cash and cash balances are simply the outcome of firm profitability and financing needs. While some predictions of the two theories are similar, an important difference is that under the financing hierarchy theory firms which invest more will have less cash.

Previous cross-country studies have shown that good corporate governance tends to reduce corporate cash holdings. Corporate cash holdings have both costs and benefits, but these differ from the managers and shareholders points of view, thus creating an agency problem. Holding cash provides insurance against macroeconomic shocks, which is a benefit from the point of view of both the managers and the shareholders. However, in the absence of strong corporate governance, managers might have a preference for much higher levels of cash holdings compared to those which would maximize shareholders' value. A cross-country analysis carried out by Dittmar et al. (2003) conclude that corporate governance is an important determinant of cash holdings, since their results show that corporate cash holdings in countries in which shareholder rights are not well protected are twice as much as those in countries with good shareholder protection.

In the context of Japan, the economic environment as well as some characteristics of the legal and corporate governance framework might contribute to large corporate savings, both by increasing managers' preferences for cash holdings and by exacerbating the agency problem. These are discussed in more detail below.

Starting with the economic environment, entrenched deflationary expectations are likely to be an important determinant of large cash holdings in Japan. A deflationary environment lowers the opportunity cost of holding cash for both managers and shareholders. As stressed by Bank of Japan (BoJ) Governor Kuroda in a recent speech, deflation encourages holding cash over alternative more productive uses of resources.² Even though recent developments suggest that Japan has made progress towards reviving growth and exiting deflation, if firms do not believe that the recovery is long-lasting and that there are profitable investment opportunities, they can be reluctant to reduce their cash holdings.

Moving to factors related to the legal framework, bankruptcy procedures might increase managers' preference for precautionary cash holdings in Japan. Japanese firms might tend to accumulate larger cash balances as a form of insurance against having to file for bankruptcy. Kinoshita (2013) makes the point that, due to the lack of pre-packaged bankruptcy reorganization procedures, the threats faced by managers when filing for bankruptcy in Japan

² *"In a state of deflation, the holding of cash or deposits will become a relatively better investment. In fact, cash and deposits held by Japanese firms have reached 230 trillion yen, close to 50 percent of nominal GDP. Persistent deflation has created an environment in which the status quo is better than making investment in new initiatives, and has brought a sense of stagnation to Japan."*, in "Overcoming Deflation: The Bank of Japan's Challenge" available at http://www.boj.or.jp/en/announcements/press/koen_2013/ko131010a.htm/

are higher than those faced in the other advanced countries, such as the US and Germany. For example, in Japan management faces a higher threat of loss of initiative in the enterprise and of being prosecuted under civil and criminal law in case of bankruptcy.

As shown in Table 1, which compares Japan to the US and Germany, only a small number of bankruptcy applications are made in Japan for reorganization (as little as 420 in 2012). Even after taking into account differences in the size of the Japanese and US economies, this is in stark contrast with the much higher number of applications made under Chapter 11 in the US. In comparing Japan with Germany, we need to take into account that the German procedure of *Insolvenzordnung* does not distinguish between reorganization and liquidation. If we assume that half of the *Insolvenzordnung* procedures will end up in liquidation and half in reorganization, Japan again stands out as having a very low number of reorganization procedures. The fact that reorganization procedures are not widespread in Japan implies that managers might want to hoard cash as a way to avoid having to file for bankruptcy.

Kinoshita (2013) also makes the point that filing of a bankruptcy substantially increases the threat of dismissal for employees in Japan compared to the US. Japanese employees are therefore likely to be more adverse to bankruptcies compared to US employees, which can also contribute to higher precautionary cash holdings of firms.

Table 1. Number of Bankruptcy Procedures in Selected Countries (2003–12)

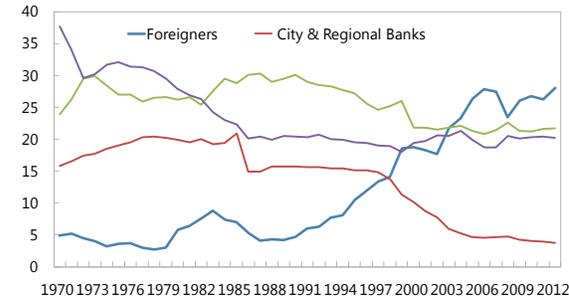
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
United States (Chapter 11)	9,762	10,882	6,250	5,701	4,688	6,274	10,348	13,583	11,093	9,616
Germany (<i>Insolvenzordnung</i>)	23,061	23,898	23,247	23,291	20,491	21,359	24,301	23,482	23,586	n.a.
Japan (Reorganization)	856	551	592	536	601	906	716	529	519	420

Source: Kinoshita (2014)

In Japan, takeover regulations and share ownership structure might also not provide enough pressure on managers to act in the shareholders' interests. For example, Kinoshita (2013) argues that there is a significant imbalance in the discretionary powers of the bidder and of the directors of the target enterprise in the Japanese legal system, a situation which might provide disincentives for takeovers. As a consequence, takeovers in Japan are relatively rare, thus reducing pressure on companies to use resources in a productive way.

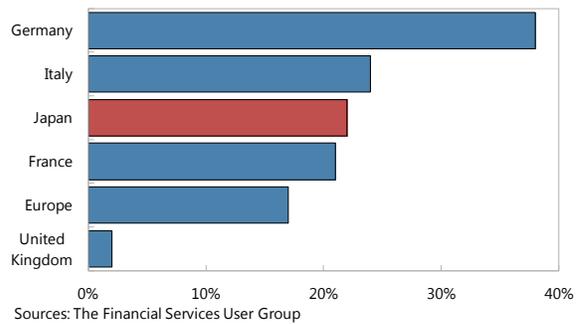
Share Holding Ratio by Investor Category

(%: on a value basis)



Sources: Tokyo Stock Exchange

Share Holding Ratio by Nonfinancial Companies

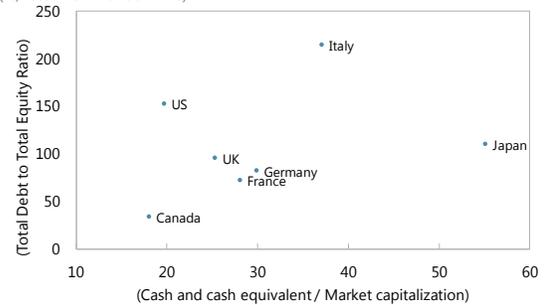


Sources: The Financial Services User Group

Kinoshita (2013) also argues that cross-shareholding might be another contributing factor to high cash holdings, because corporations who hold stocks of other corporations might have a greater interest in so-called ‘individual benefits’—such as securing credit, developing a deeper business relationship with the issuer, and pursuing the self-defense of the management bodies of both enterprises—than in the maximization of stock values. As it can be seen in the text chart, cross-shareholding in Japan is still widespread and above the European average. Against this background, many corporations in Japan, in exercising their shareholder rights, may not place adequate pressure on managers of firms whose stock they own to pursue higher monetary returns.

Debt to Equity and Cash Holdings Ratio 2012

(%: listed nonfinancial firms)



Sources: Bloomberg

The role of banks in financing firms’ activities can also affect corporate cash holdings in Japan. Pinkowitz and Williamson (2001) have argued that Japanese corporate cash balances are affected by the monopolistic power of banks. Their analysis suggests that banks have an interest in extracting rents from the corporate sector by pushing companies to hoard cash rather than using it to pay down their debt. Pinkowitz and Williamson (2001) argued that this effect is important in Japan but became less strong over time as banks’ monopolistic power decreased starting from the late 1980s, due to regulatory changes and financial sector shocks. However, as shown in the text chart, Japan’s debt-to-equity ratio, which can be interpreted as a broad measure of bank’s power, is still higher than in most G-7 countries.

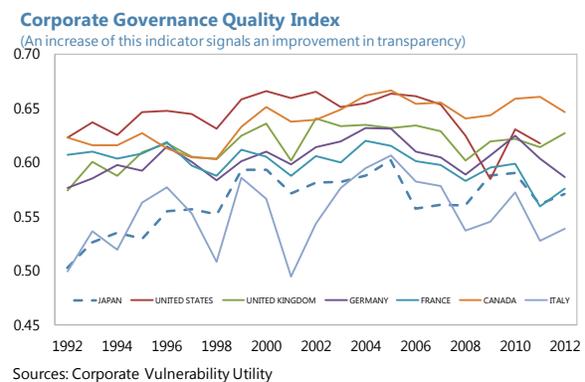
Weaker corporate governance in Japan compared to other advanced countries can also make solving the agency problem more difficult. As discussed in more detail in the next section, some internationally comparable indicators suggest that corporate governance might be weaker in Japan compared to other advanced countries. As a consequence, managers in Japan might have more leeway to pursue individual benefits rather than maximize shareholders value, thus choosing to hold more cash. Nakajima (2013) argues that weak market

monitoring mechanisms and weak corporate governance make it difficult to solve the agency problem in Japan, which results in high cash holdings.

The above discussion suggests that corporate governance and legal framework reforms can be important in Japan to encourage companies to reduce cash holdings. In the next section, we look in more detail at Japan's corporate governance indicators from an international perspective.

IV. CORPORATE GOVERNANCE IN JAPAN: AN INTERNATIONAL COMPARISON

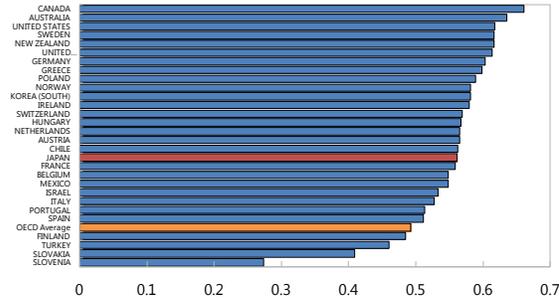
An international comparison based on the Corporate Governance Quality (CGQ) index developed by De Nicolò, Laven and Ueda (2006) suggests that Japan scores low compared to other G-7 countries. The CGQ index is constructed at the country level using accounting and market data of samples of listed nonfinancial firms. The index is a simple average of three proxy measures of outcomes of corporate governance in the dimensions of accounting disclosure and transparency. As such, it gives an account of the *de facto*, as opposed to *de jure*, corporate governance environment in a given country. As shown in the text chart, the CGQ dynamics suggests that although Japan's corporate governance quality has improved since the early 1990s, it is still the second lowest in the G7 after Italy.



A disaggregated analysis of the various components of the CGQ index suggests that Japan is doing relatively well in terms of accounting standards but less so along other important transparency dimensions. As shown in the text charts, Japan's level of the CGQ is higher than the OECD average (although still lower than most G-7 countries). Looking at the sub-components of the CGQ index, Japan is above the OECD average for the sub-indexes on "accounting standards"—a simple measure of the amount of accounting information disclosed by firms—and for the one on "stock price synchronicity"—which aims to capture the extent to which a poor governance environment leads to investors' inability to distinguish good performers from bad performers, and of poor governance associated with inefficient connected lending. However, Japan scores quite low and considerably below the OECD average for the CGQ sub-index on "earnings smoothing" which tracks the extent to which published accounts might conceal the true performance of firms.

Corporate Governance Quality Index 2011

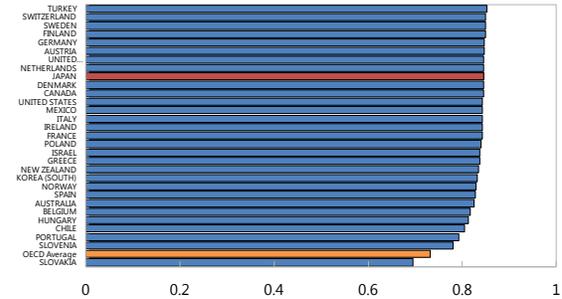
(An increase of this indicator signals an improvement in transparency)



Sources: Corporate Vulnerability Utility

Subindex: Accounting Standards Indicator 2011

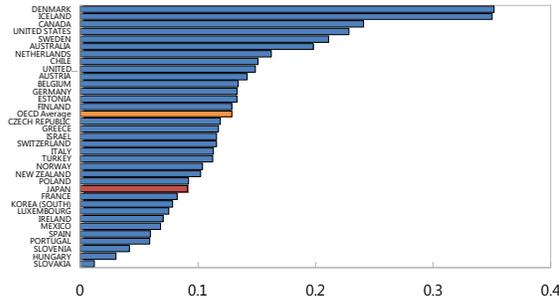
(An increase of this indicator signals an improvement in transparency)



Sources: Corporate Vulnerability Utility

Subindex: Earnings Smoothing Indicator 2011

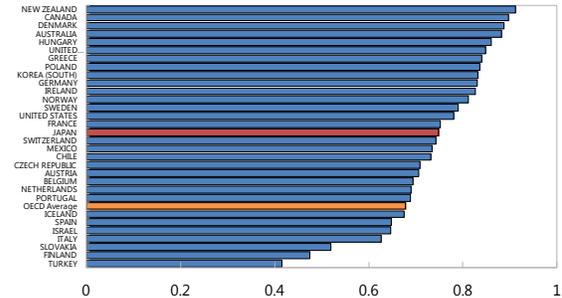
(An increase of this indicator signals an improvement in transparency)



Sources: Corporate Vulnerability Utility

Subindex: Stock Price Synchronicity Indicator 2011

(An increase of this indicator signals an improvement in transparency)

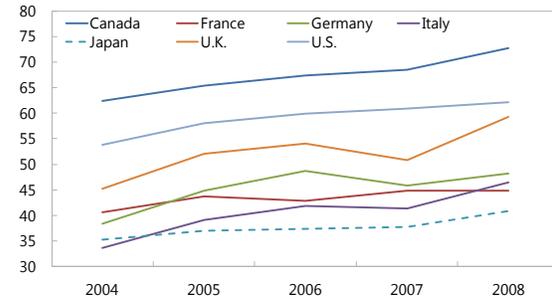


Sources: Corporate Vulnerability Utility

A different indicator which summarizes several *de jure* corporate governance firm-level attributes suggests that Japan does not fare well in an international comparison. The Firm Level Governance (FLG) index developed by Aggarwal et al.(2010) summarizes 41 firm-level governance attributes which covers four broad sub-categories: i) Board, including independence of directors and how the Board conducts its work; ii) Audit, focusing on independence and the role of auditors; iii) Anti-Take Over Provisions, which includes some aspects of shareholder rights; and iv) Compensation and Ownership, which deals with setting and monitoring of executive and directors' compensation and stock ownership. When we measure corporate governance using the FLG, we can see that Japan scored consistently lower than any other G-7 country over the years. Even compared to a wider sample of advanced countries, Japan's corporate governance performance is low both in terms of level and progress made in recent years (text charts).

Firm-Level Governance Index

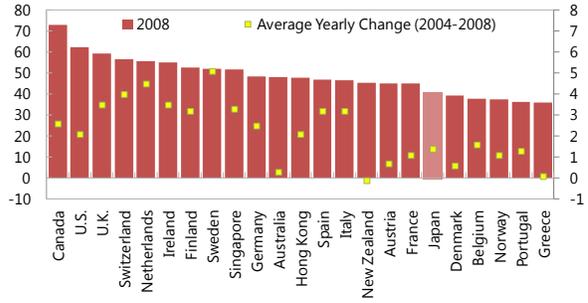
(An increase of this index signals an improvement in corporate)



Sources: Fisher College of Business Working Paper No. 2009-008

Firm-Level Governance Index

(An increase of this index signals an improvement in corporate)



Sources: Fisher College of Business Working Paper No. 2009-008

The discussion in Section III and the evidence presented in this section suggest that there is scope to improve corporate governance in Japan, and that corporate governance reforms can encourage a more productive use of resources by firms. As suggested by Kinoshita (2013), corporate governance regulations and practices are likely to contribute to excessive corporate cash holdings in Japan. Furthermore, an international comparison based on the CGQ and FLG indexes suggests that there is scope to improve Japan's corporate governance standards and bring it closer to that of other advanced countries. In the next Section we focus more in detail on what could be the impact of improving corporate governance in Japan by presenting some regression results for a panel of Japanese companies.

V. CORPORATE GOVERNANCE AND CASH HOLDINGS IN JAPAN: EMPIRICAL ANALYSIS

In this section, we assess the impact of corporate governance on corporate cash holdings by estimating a model for a panel of Japanese firms which include a firm-specific governance index. Our data set includes 3,412 nonfinancial firms for the 14 years between 2000 and 2013 (or less, depending on data availability). The dependent variable is the stock of cash and cash equivalents in percentage of market capitalization, which is regressed on variables which we expect to impact corporate cash holdings. The effect of corporate governance in our regression is captured by the "Proprietary Bloomberg Score" an index which ranges from 0.1 for companies that disclose a minimum amount of governance data to 100 for those that disclose every data point collected by Bloomberg. Each data point is weighted in terms of importance, with board of directors data carrying a greater weight than other disclosures. The score is also tailored to different industry sectors. In this way, each company is only evaluated relative to its industry sector. The choice of this variable as a proxy for corporate governance was mostly driven by data availability at the firm level (please see the Appendix for more details on variables' definitions and data sources).

Our regressors also include controls for other factors which we expect to affect cash holdings. According to the trade-off theory (Opler et al. 1999; Dittmar et al. 2003) firms hold more cash when they are smaller, have higher investment opportunities, and have higher cash flow concerns, because these are characteristics which either increase the cost of cash shortfalls or increase the cost of raising funds. As proxies for firms' size and investment, we include the number of employees and the value of common stock—which are expected to

have negative signs—and capital expenditures, which is expected to have a positive sign.³ As a proxy for cash flow concerns we include the cash conversion cycle, defined as Inventory Turnover Days + Account Receivable Turnover Days - Accounts Payable Turnover Days. This variable is expected to have a positive sign, since the trade-off theory postulates that firms which take longer to convert their resources into cash want to keep a higher stock of cash. We also include the free cash flow per share which we expect to have a positive sign, in accordance with predictions of the financing hierarchy theory that firms with high cash flows will hold more cash. In order to capture the effect of bank power on cash holdings stressed by Pinkowitz and Williamson (2001) we include the debt-to-equity ratio, which we interpret as a broad measure of banks' monopolistic power in lending and we expect to have a positive sign. We also include lags of the dependent variable to control for autocorrelation and habit formation in cash holding.

Our results suggest that better corporate governance reduces cash holdings. Table 2 summarizes our panel regression for various estimation techniques. Regardless of the specific estimation method used, our indicator of corporate governance always has a negative sign, suggesting that improving corporate governance would reduce corporate cash holdings in Japan. The coefficient is also significant at the 10 percent level for fixed effects estimation with default standard errors and at the 1 percent level using random effects and Arellano Bond estimations. If we use fixed effects with robust standard errors, the coefficient is still negative but the level of significance is reduced to 15 percent.

Several other factors also have an impact on cash holdings. In accordance with the prediction of the trade-off theory, firms' size as captured by the log of common stock has a negative coefficient when we use fixed effects. However, the coefficient turns positive for other estimation techniques and is in general not significant. The number of employees has a positive and highly significant coefficient, which is in contrast with the prediction of the trade-off theory, but could be explained in the Japanese context by the “aversion to bankruptcy” channel highlighted by Kinoshita (2013), and discussed in Section III, i.e. firms which are more labor intensive might accumulate more cash as a way to avoid bankruptcies and protect employment. The cash conversion cycle has a negative sign in contrast with the predictions of the trade-off theory but it is not significant. The cash flow per share has the expected positive sign according to the financing hierarchy theory and is statistically significant. This result is also consistent with the finding by Horioka and Terada-Hagiwara (2013) on a panel of firms from 11 Asian countries. The debt-to-equity ratio has a positive and mostly significant coefficient, confirming the result by Pinkowitz and Williamson (2001) that higher banks' monopolistic power tends to push companies to hoard cash in Japan. The impact of capital expenditure is negative and mostly significant, which is contrary to the trade-off theory, but can be explained in terms of the financing hierarchy theory.

³ These three variables enter the regression in logarithmic form.

Table 2. Determinants of Cash Holdings in a Panel of Japanese Firms: Regression Results 1/

	Fixed Effects	Fixed Effects (Robust SE)	Random Effects	Arellano Bond (2 lags)
Dependent Variable: Cash Holdings in Percent of Market Capitalization				
Governance Index	-0.089 [-1.82]*	-0.089 [-1.44] 2/	-0.380 [-8.59]***	-0.327 [-4.87]***
Log of Common Stock	-0.380 [-0.69]	-0.380 [-0.78]	0.280 [1.35]	0.232 [0.28]
Log of Number of Employees	8.179 [4.45]***	8.179 [2.81]***	2.002 [5.17]***	10.367 [4.08]***
Cash Conversion Cycle	-0.009 [-0.72]	-0.009 [-0.37]	-0.003 [-0.82]	-0.014 [-0.92]
Log of Capital Expenditure	-1.838 [-3.42]***	-1.838 [-2.30]**	-2.187 [-7.78]***	-0.790 [-1.23]
Debt-to-Equity Ratio	0.010 [3.70]***	0.010 [1.61]	0.005 [2.61]***	0.011 [3.77]***
Free Cash Flow per Share	0.007 [2.77]***	0.007 [2.20]**	0.002 [1.18]	0.014 [5.38]***
Lagged Dependent	0.095 [7.26]***	0.095 [1.93]**	0.786 [98.32]***	0.129 [6.47]***
Lagged Dependent				-0.158 [-11.53]***
R-squared (overall)	0.060	0.060	0.647	...

Source: IMF Staff Calculations

1/ T-statistics are reported in parenthesis. * denotes significance at 10% level, ** significance at 5% level, and *** significance at 1% level.

2/ Level of significance is 15 percent

The estimated impact of improving corporate governance on cash holdings in Japan is sizeable. In line with findings from other cross-country governance indicators mentioned above, the corporate governance proxy used in our regressions also indicates that Japanese firms' governance score on average was lower than other advanced countries' except Germany, for most years between 2000 and 2013 (or less depending on data availability). Table 3 shows estimates of how much improving corporate governance—as measured by the index we use in the regression—could contribute to reducing cash holdings on the basis of our results. Specifically, we have calculated by how much cash holdings could be reduced for a representative Japanese firm if the index were to improve from our Japanese firms' panel average of 38.9 to: the G7 (excluding Japan and Germany) average of 49.1; the maximum in Japanese firms' panel of 62.5; and the theoretical maximum value that the index could take of 100. The results vary depending on which regression coefficients we use amongst the ones presented in Table 2, which correspond to various estimation methods. Overall, Table 3 suggests that the effect of improving corporate governance on cash holdings could be sizeable, since the estimated reductions in the cash-to-market capitalization ratio range from about 1 to about 23 percentage points.

Table 3. Estimated Reduction in Cash Holdings Due to Improvement in Corporate Governance
(cash to market capitalization, percentage points)

	Fixed Effects	Random Effects	Arellano-Bond	Average of Estimation Methods
Average to Maximum in Panel (index from 41.5 to 62.5)	1.9	8.0	6.9	5.6
Average to Theoretical Maximum (index from 41.5 to 100)	5.2	22.2	19.1	15.5

Source: IMF staff calculations

In interpreting these results some caveats need to be kept in mind. First of all, our results only refer to first round effects of improving corporate governance on cash holdings. If firms use the reduction in cash to finance increases in wages and investment, this will stimulate the economy and help Japan exit from deflation. A higher inflation environment, in turn, will make hoarding cash less attractive, giving further incentives to firms to reduce cash holding beyond the amount captured in our regressions. It is also important to keep in mind that the index that we have used in the regression refers solely to disclosure of data related to corporate governance. As such, it is not necessarily a perfect proxy of corporate governance, because the fact that data are disclosed does not guarantee in itself that corporate governance practices are improved. We should therefore not conclude that the only policy recommendation flowing from our analysis is to just improve disclosure. Rather, we see our empirical analysis as supporting the more general point that corporate governance and legal framework reforms can contribute to reducing corporate cash holdings. With this in mind, the next section will discuss the progress made so far in improving corporate governance in Japan, and discuss some options for further reform.

VI. OPTIONS FOR CORPORATE GOVERNANCE REFORM IN JAPAN

The discussion and empirical analysis presented in the previous section suggest that corporate governance reform should be part of Japan's growth strategy. Such reforms would help remove some of the bottlenecks of the legal and corporate governance framework which encourage high corporate cash holdings and prevent a more pro-growth use of resources. Corporate governance reforms would also enhance the transmission of the BoJ's Quantitative and Qualitative Easing (QQE) framework, by reducing cash holdings, contributing to investment and wage growth and therefore stimulating actual and expected inflation.

The government's plan for corporate governance reform is a step in the right direction. Current reform plans include strengthening audit and monitoring functions and encouraging companies to nominate independent outside directors by using a "comply-or-explain" approach, which requires firms that choose not to have independent outside directors to issue a report to shareholders explaining why.

The Council of Experts, which was established at the FSA, also introduced in February 2014 a Stewardship Code aimed at increasing fiduciary responsibilities of institutional investors. Such a code will encourage investors to push managers to maximize shareholders' value rather than pursuing individual benefits (see Box 1 for more details on the Stewardship Code). The recent launch of the JPX-Nikkei Index 400 is also expected to improve corporate governance. The JPX-Nikkei Index 400 is Japan's first broad stock index that includes only profitable companies with good corporate governance. The index is expected to have a positive impact on corporate behavior by exerting pressure to improve profitability and corporate governance.⁴

Indeed, recent developments suggest that the introduction of the Stewardship Code and the JPX-Nikkei Index 400 might result in Japanese institutional investors taking a more active role in improving firms' corporate governance. Japan's nearly 130-trillion yen (\$1.3 trillion) public pension fund (GPIF) accepted the Stewardship Code, a move expected to improve equity returns through more engagement with companies whose stock it owns. Adoption of the code by GPIF is expected to encourage other institutional investors to follow suit, and in fact as of end-May 2014, 127 institutional investors, including most of the largest Japanese asset managers, had subscribed to the code. JPX-Nikkei Index 400 is becoming increasingly popular amongst mutual funds, and the number of funds linked to the index reached 22 (with a total of 101 billion yen of assets under management) as of end May.

⁴ Central to the calculation of the JPX-Nikkei Index 400 is a three-year-record of return on equity employed (ROE), along with various qualitative measures of corporate governance, such as independent directors and reports in English.

Box 1. Japan's Stewardship Code

Japan's Stewardship code for institutional investors was introduced on February 26, 2014. The Code defines principles considered to be helpful for institutional investors to fulfill their "stewardship responsibilities", i.e. enhancing the medium- to long-term investment return for their clients and beneficiaries through constructive engagement and purposeful dialogue with investee companies. The Code states that, in order to achieve this goal, institutional investors should improve the investee companies' corporate value and sustainable growth, based on in-depth knowledge of the companies and their business environment.

The Code was prepared, at the request of the Prime Minister, by a Council of Experts established by the Financial Services Agency (FSA). The Council included academics, managers, and government representatives. Before finalizing the Code, the Council published drafts both in Japanese and English, and solicited comments from various institutions and individuals, which were taken into account in the final draft. The Council also recommended that the Code should be updated periodically, about once every three years. The Code is not a law or a legally binding regulation, and institutional investors who support the code are expected to adopt it on a voluntary basis.

The Code adopts a "principle-based" approach, which implies that institutional investors are expected to fulfill their stewardship responsibilities focusing on substance, rather than following a "rule-based" approach which would prescribe a detailed set of actions to be taken by the investors. The Code specifies seven principles, as well as some guidance for their implementation. The principles of the Code are as follows (for more details, see <http://www.fsa.go.jp/en/refer/councils/stewardship/20140407.html>, which also includes a link to the full text of the Code in English):

- Institutional investors should have a clear policy on how they fulfill their stewardship responsibilities, and publicly disclose it.
- Institutional investors should have a clear policy on how they manage conflicts of interest in fulfilling their stewardship responsibilities, and publicly disclose it.
- Institutional investors should monitor investee companies so that they can appropriately fulfill their stewardship responsibilities with an orientation towards the sustainable growth of the companies.
- Institutional investors should seek to arrive at an understanding in common with investee companies and work to solve problems through constructive engagement with investee companies.
- Institutional investors should have a clear policy on voting and disclosure of voting activity. The policy on voting should not be comprised only of a mechanical checklist; it should be designed to contribute to the sustainable growth of investee companies.
- Institutional investors in principle should report periodically on how they fulfill their stewardship responsibilities, including their voting responsibilities, to their clients and beneficiaries.
- To contribute positively to the sustainable growth of investee companies, institutional investors should have in-depth knowledge of the investee companies and their business environment and skills and resources needed to appropriately engage with the companies and make proper judgment in fulfilling their stewardship activities.

The Code explicitly states that the above principles should be applied to each institutional investor depending on the specific conditions and situations. For example, implementation of the code might differ depending on the investor's size and investment policies (e.g. long term versus short term; active versus passive strategies). To allow for such flexibility, the Code also adopts a "comply-or-explain" approach, which implies that if an institutional investor finds that some of the principles of the Code are not suitable for its operation, then it can decide not to comply with them, provided that the investor explains its reasons for doing so. As of end-May, 127 institutional investors, including the Government Pension Investment Fund (GPIF), had accepted the Code.

Despite these positive developments, since our empirical analysis suggests that the gains from improving corporate governance could be large, reforms aimed at discouraging excessive corporate savings could be more ambitious. In particular, the following additional measures could be considered:

- Expanding the use of outside directors beyond current plans and reinforcing their independence. The proportion of independent outside directors out of all directors in 1,752 companies listed on the first section of the Tokyo Stock Exchange is about 9 percent in 2013. This ratio is extremely low compared to other advanced countries. For example, the proportion of independent outside directors is about 70 percent in the United States, 50 percent or higher in the United Kingdom, and greater than 30 percent in South Korea (Miyajima 2012). Most other advanced countries require a substantial number of outside directors either in a mandatory way (more than half of the board in the US, more than one quarter of the board in Korea) or under a “comply or explain” approach (e.g. more than half of the board in the UK, an “appropriate number” in Germany, and half of the board in France). The current plan in Japan is to introduce a requirement under a “comply or explain” approach for only one outside director. Considering the experience of other countries, there seems therefore to be scope for expanding the use of outside directors beyond current plans, either by adopting a US-style mandatory approach, or by increasing the number of independent outside directors required under the “comply or explain” approach, as done for example in the UK and France. In Box 2, we discuss recent developments in Japan related to outside independent directors, and elaborate more on why Japan would benefit from expanding their use.
- Measures to enhance board diversity. Diversification of the board members can balance decision making by bringing different points of view. According to a study of Fortune 500 companies (Catalyst 2007), companies with more female board directors outperform those with the least for several financial measures such as Return on Equity, Return on Sales and Return on Invested Capital. In Japan, there is scope to improve the representation of women and foreigners in boards. For example, while women account for 20.7% of board members in the U.K and 16.9% in the U.S., the figure in Japan is only a 1.1%.⁵ Having more women in boards would also create role models for working women and generate synergies with reforms aimed at increasing female labor participation, which are important for growth (see Steinberg and Nakane 2012). Having more foreigners in corporate boards could also help Japanese corporations in expanding abroad and exploring new markets, which would help counteract the effects of Japan’s declining and aging population.

⁵ See <http://www.catalyst.org/knowledge/women-boards>.

Adoption of a corporate governance code for firms to complement the recently introduced Stewardship Code for institutional investors. Adopting both codes, as was done for example by the UK, would create synergies by encouraging the management of both institutional investors and of companies in which they invest to cooperate in maximizing returns for shareholders. On June 24, the Cabinet has approved such a corporate governance code for firms as part of its growth strategy, which would be a further step in the right direction.

- Implementation of tax and regulatory reforms which would reduce incentives for shareholders to pursue “individual” rather than monetary benefits. In this context, limits or measures which create incentives to end excessive cross-shareholdings could be considered. For example, tax reforms were successful in Germany in the early 2000s in reducing cross-shareholding, although it increased again from 2007. Also, cross shareholdings in OECD countries are frequently limited by law (OECD 2007). Similar tax and legal reforms could be considered in Japan.
- Measures aimed at reducing the threat faced by firm managers in case of filing for bankruptcy, for example by introducing pre-packaged reorganization plans such as those available in the US under Chapter 11. Such measures would reduce the incentives for corporations to hold cash as insurance against filing for bankruptcy. Also it is important that the government follows up on its plans to propose legislation which would limit business owners’ individual liability in case of bankruptcy, since such a measure would reduce the threat associated with filing for bankruptcy. Plans to encourage creditor-led debt workout to make it easier for companies to have debt forgiven, a move aimed at encouraging quicker corporate rehabilitation, would also help if implemented.
- Removing bottlenecks which prevent takeovers, such as reducing the asymmetry between the duties of the bidder and those of the target enterprise in takeover regulations and introducing a more favorable tax treatment for the owners of stocks of companies which are acquired. These measures would encourage takeovers, therefore putting pressures on managers to prioritize profitability over cash holdings as cash rich companies are likely to be considered takeover targets.

Box 2. Independent Directors

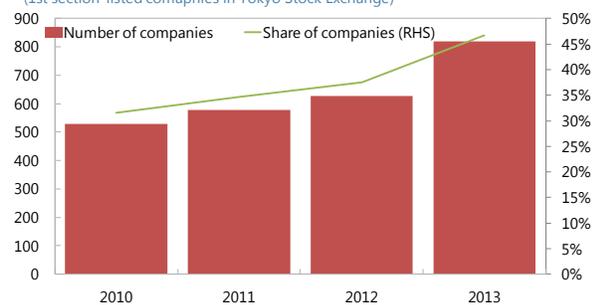
Separately from the initiatives taken by the government, Tokyo Stock Exchange (TSE) made its own effort to increase the number of independent directors and substantial progress has been made. TSE has been requiring listed companies to appoint at least one or more independent officers (meaning either an outside director or an outside statutory auditor who is not likely to have a conflict of interest with general shareholders) since 2010 for the protection of general investors. In August 2012 TSE recommended all TSE-listed companies to secure at least one independent director. The rules were strengthened in February 2014 and it now states that any company whose shares are listed on TSE is required to make its best efforts to appoint one or more directors as independent officers. As a consequence, the share of companies with at least one independent director among all companies listed in the 1st Section of TSE increased from 32 percent in 2010 to 47 percent in 2013 (text chart).

Despite the progress made so far, there is a need to expand the adoption of independent directors more to improve corporate governance. Having more than one independent outside director would strengthen corporate governance by mitigating the risk of isolation in the board, thus increasing the voice of independent directors. Having multiple independent directors could also create synergies with efforts to enhance board diversity. Although almost half of the companies listed on the 1st Section of TSE now adopt one or more independent directors, only 1.2 percent of companies secure more than half of board membership as independent directors. As a result, the proportion of independent directors out of all directors in 1,752 companies listed on the 1st Section of TSE was only 9 percent in 2013.

While having multiple independent directors in the board may not be sufficient to reduce cash holdings, it seems an important determinant, suggesting that it should be a necessary and important component of comprehensive corporate governance reform.

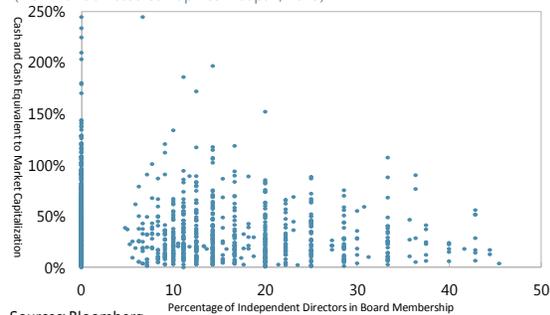
As shown in the text chart, although the level of cash holdings varies among companies with zero or a very low share of independent directors, it is rare for companies with high shares of independent directors to have extremely high cash holdings. At the same time, very high cash holdings tend to be associated with relatively low shares of independent directors. All 67 cases of Japanese nonfinancial listed companies with greater than 100 percent cash-to-market capitalization ratio in 2013 occurred in companies whose share of independent directors in total board membership is less than 30 percent.

Companies with One or More Independent Directors
(1st section-listed companies in Tokyo Stock Exchange)



Sources: Japan Association of Corporate Directors

Cash Holdings and Independent Directors
(Nonfinancial listed companies in Japan; 2013)



Sources: Bloomberg

VII. CONCLUSIONS

This paper argues that Japan's excessive corporate savings might be holding back growth, by preventing a more efficient use of resources. The literature has identified various determinants of cash holdings, including good corporate governance, which usually contributes to reducing excessive corporate savings by putting pressure on managers to act in shareholders' interests. We argue that this channel is likely to be particularly important in Japan, given its low scores, compared to other G-7 countries, in terms of corporate governance indexes.

The hypothesis of a relationship between improving corporate governance and unlocking corporate savings in Japan is confirmed by the empirical analysis that we carry out in this paper. Panel regressions carried out on a panel of about 3,400 Japanese firms suggest that improving corporate governance in Japan—proxied by an index summarizing company disclosure of governance data—could significantly reduce corporate cash holdings.

On the basis of our empirical analysis, we conclude that comprehensive corporate governance reform should be a key component of Japan's growth strategy. In our assessment, the steps recently taken by the authorities in this area—such as the introduction of the Stewardship Code for institutional investors and plans to encourage the use of outside directors on a “comply or explain” basis—go in the right direction. In our assessment, however, reforms could be more ambitious. In this regard, possible additional measures could include complementing the Stewardship Code with a corporate governance code for firms, and expanding the use of outside directors beyond current plans.

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APPENDIX I. BENCHMARK MODEL

An econometric model of determinants of corporate cash holdings was estimated for a panel of 3,412 nonfinancial Japanese firms for the 14 years between 2000 and 2013 (or less, depending on availability). We conducted regression using both fixed and random effects, as well as Arellano-Bond estimation with two lags.

Our dependent variable is cash and cash equivalent in percent of market capitalization, available from Bloomberg.

Explanatory variables and data sources are as follows:

- The proxy for corporate governance is the “Proprietary Bloomberg Score”, an index which ranges from 0.1 for companies that disclose a minimum amount of governance data to 100 for those that disclose every data point collected by Bloomberg. Each data point is weighted in terms of importance, with board of directors data carrying greater weight than other disclosures. The score is also tailored to different industry sectors. In this way, each company is only evaluated in terms of the data that is relevant to its industry sector.
- Common stock (which enters the regression in logarithmic form), value of common stock as reported by the company, from Bloomberg.
- Number of employees of the firm (which enters the regression in logarithmic form), from Bloomberg.
- Cash conversion cycle defined as Inventory Turnover Days + Account Receivable Turnover Days - Accounts Payable Turnover Days, from Bloomberg.
- Capital expenditure (which enters the regression in logarithmic form), from Bloomberg.
- Debt-to-equity ratio, defined as the sum of short term and long term borrowings divided by total shareholder's equity, multiplied by 100 from Bloomberg.
- Free cash flow per share, calculated as free cash flow (cash from operations - capital expenditures) divided by the average basic number of shares for the period, from Bloomberg.