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# PUBLIC DEBT MANAGEMENT IN JAPAN – EVALUATION BASED ON RECENT TRENDS IN OECD COUNTRIES*

## 1. Preface

Public debts are present in almost all highly developed economies. They have a big influence on most important macroeconomic measures such as inflation, growth rate, balance of payment. In certain circumstances using public debt to finance public expenditures may lead to a boost of economic activity and lower unemployment rate. However, public debts create a burden to future generations. They also generate costs for states budgets. Negative influence of public liabilities on national economies may be lowered by appropriate public debt management.

This article is focused on public debt management in the Japanese Empire in comparison with recent trends in public debt management in other OECD countries. Due to low level of transparency of public finance in Japan his study deals only with management of central government debt.

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## 2. Concept of public debt management

All public debts are managed. Recent literature comprises many definitions of public debt management. The most popular are as follows:

- public debt management is a government's choice regarding the composition of its outstanding liabilities (A. Missale) [19, s. 10],
- decisions or process of executing decisions concerning amount, structure and maturity of treasury securities which constitute liabilities of government (S.J. van der Waldt) [27, s. 3],
- public debt management is the process of establishing a strategy for managing the government's debt in order to raise the required amount of funding, pursue its cost and risk objectives, meet any other public debt management goals, which the government may have set. Such as developing and maintaining an efficient and liquid market for government securities (International Monetary Fund, The World Bank) [9, s. 11; 12, s. 2; 13, s. 11].

In this article, it is assumed that management of public debt is the sum of all systematic tasks (planning, organisation, control) to manage both the size and structure of public debt and the level and structure of debt servicing costs as well as other related expenditures.

It appears that the process of public debt management is attributed by the complexity of tasks and large number of entities involved in co-management of public debt, the characteristics and various types of related financial flows. Thus it comprises the following components:

- strategic management of public debt which involves: determination of the roles of deficit and public debt in the entire of national financial policy, setting the guidelines for developing the instruments of managing public debt, and defining the objectives of public debt management,
- operational management of public debt which means the actions taken by the entity which is directly involved in assuming and servicing public debt and has a definite influence both on public debt characteristics and on the structure of related financial flows.

To implement the objectives of operational public debt management the following instruments are used:

- decision - making procedures,
- debt instruments,
- operations on debt components,
- legal and organisational instruments [1, s. 9-10; 14, s. 2-19].

## 3. Recent trends in public debt management in OECD countries

The 1970s witnessed the beginning of transformation in operational public debt management that has lasted until now. Many OECD countries, that at the time suffered from the impact of the oil shocks (growing inflation, unemployment, high budgetary deficit and balance of payments deficit, fast increase in public debt), have opted for making the processes of public debt management market-oriented. This involved a change in the methods and instruments of acquiring loan funds and of controlling the existing debt. However, initially without any institutional transformation. It was believed that efficient operational management of public debt is possible within a diversified institutional framework, with overall responsibility for public debt linking with the Ministry of Finance/ Treasury, provided that the procedures of decision making and implementation are clear and transparent.

In the course of time, the transformations also covered the institutional model of operational management of public debt. The main recent trends in public debt management in OECD countries are:

- evolution of institutional structure of public debt management – by means of switching from public debt management executed by ministry of finance/treasury or central bank to independence of public debt management policy,
- increasing role of primary dealers systems,
- increasing role of Electronic Trading Systems (ETS),
- increasing role of benchmark issues,
- diversity of investor base in all part of treasury securities market,
- development floaters and Strips,
- increasing role of new type of auction mainly uniform – price auction,
- increasing role of risk management using futures and swaps,
- increasing role of transparency and accountability [5, s. 1-4; 7, s. 8-133; 8, s. 1-28; 14, s. 7-32; 24, s. 93-104].

In most OECD countries public debt management is operationally independent and executed by agency which is part of general government sector (Autonomous Debt Management Agency). The main reasons for the creation of such operationally independent agencies are as follows:

- avoiding to influence of politics and bureaucratic procedures,
- avoiding conflicts between objectives of monetary policy,
- increasing need of use more sophisticated instruments of debt management and methods of risk management,
- increasing problems with staff appraisal.

It is generally agreed that in the most cases ADMA can execute public debt management policy more efficiently than Ministry of Finance or central bank [6, s. 1-20; 7, s. 102-109].

Primary dealers (PDs) are financial institutions which, on the basis of agreement with State Treasury and in return for special rights or direct reward, take on certain responsibilities in the field of primary and secondary treasury securities markets. The main role of primary dealers systems is to enhance treasury securities markets liquidity through continuous market-making. Most primary dealers are obliged to buy certain amount of treasury securities at auctions. Primary dealers are used in most OECD countries except Germany, Switzerland and Japan [4, s. 4, 41-58; 5, s. 1-4; 11, s. 3-5; 18, s. 6-9; 22, s. 1-4; 24, s. 93-104].

Traditionally, treasury securities dealers were in contact with each other and with wholesale costumers using telephones. Recent common trend in this market is the use of electronic trading systems (ETS) to communicate with business partners. Electronic Trading System can make markets more transparent and flexible, and also lower transaction costs. Such systems can have an impact on market liquidity. The most popular electronic secondary markets for treasury securities are organized by Italian company MTS founded in 1988 [7, s. 37-40, 83-99; 10, s. 1-7; 14].

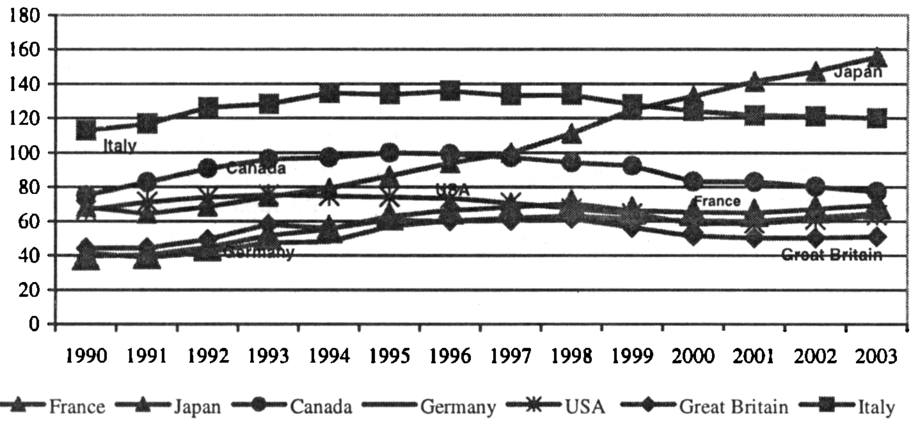
In most OECD countries issue policy is focused on significant issues called „benchmarks". The biggest British and American benchmark issues have an average amount about 17-18 billion USD Benchmark issues bring about higher liquidity, which results in lower costs for State Treasury. The most common kind of benchmarks are 10-year bonds. Public debt managers are also interested in diversity of investor base in all parts of treasury securities markets because it can lower placement risk [7, s. 16-19; 23, s. 164].

In many OECD countries new instruments of public debt management are applied. Floaters are bonds with variable interest rate. Whereas Strips are instruments created by separate trading interest cash flows and principal of bonds. The uniform – price auction is a type of auction in which all winners (bidders whose offers are accepted) buy treasury securities at the same price. This kind of auction can be more effective because it facilitates more aggressive bidding. Over the last decade many OECD countries started to manage their financial risks using futures and swaps – mainly foreign exchange risk. This policy is focused on decreasing costs of debt service [7, s. 51-56, 61-70; 17, s. s.18-110; 21, s. 1-3; 26, s. 103-106; 28, s. 1-22].

## 4. Public debt management in the Japanese Empire – examination

In the mid of the 1960s the Japanese government dropped the policy of the balanced budget. Initially only small budget deficit, from 1973 on, increased largely.

Since 1980 the Japanese budget policy has been budget reduction oriented by means of reducing public expenditures. The budget situation underwent some major deterioration after the „bubble economic" had come to an end. Over the last decade Japan has become the mostly indebted among OECD countries. In 1990 gross public liabilities of the Japanese Empire was about 68,3% GDP. At the same time, many OECD countries had public debt in relation to GDP at a higher level than Japan. For instance, Belgium (129,1% GDP), Italy (112,8% GDP) and Canada (75,1% GDP). In 2003 gross public liabilities of the Japanese Empire was about 155,7% GDP. The main reasons for such situation have been large budget deficits combined with economic stagnation. In the last 15 years growth rate of Japanese economy has been oscillating around 0%. The expansion of the Japanese public debt in relation to GDP occurred at the time when most highly developed countries managed to limit the growth of the relation of public debt to GDP or even to stop it. Now the second indebted among OECD countries is Italy, with gross liabilities at the level of 120,1% GDP (Chart 1).




(*) In case of Japan only debt of central government.

Chart 1. Gross public debt in Japan (*) and selected OECD countries in the period of 1990-2003 (in percent of GDP)

Source: OECD Economic Outlook No. 73, June 2003, Annex Table 33. General government gross financial liabilities.

Unfavorable situation in strategic public debt management is accompanied to insufficient development of operational public debt management. The main problems are as follows:

- lack of operational independence of public debt management,
- lack of primary dealers,
- too many types of bonds, too many small bond issues – not enough benchmarks,
- insufficient treasury securities market liquidity,
- underdevelopment of electronic trading systems,
- insufficient transparency,
- underdevelopment of retail bonds market.

Japanese central government debt is managed directly by Ministry of Finance. Meanwhile In most OECD countries a model of public debt management executed by independent agency became common. The big influence on such process has also central bank. Lack of operational independence of public debt management and the big role of Bank of Japan in public debt management lead to bureaucratic procedures in debt management, problems with staff appraisal, conflicts between debt management and monetary policy.

In primary market, Japanese government bonds (JGB) are sold without using primary dealers system. Discount 3-year bonds are sold to members of issuing syndicate according to a non-auction procedure. In other cases part of the issues (depending on the type of bonds – between 60% and 90%) are sold at an auction. The members of the syndicate buy the rest of the bonds at an average auction price.

In Japan there is a lack of primary dealers obliged to care for the secondary market liquidity. It may lead to restricted level of liquidity of the Japanese treasury securities markets. Nowadays Japanese government is going to implement primary dealers framework.

The Japanese government issues various types of treasury securities taking original maturity into consideration and interest rate modes:
- financing bills – issued on an irregular basis short-term securities,
- treasury bills – issued monthly, 6- or 12-month discount securities,
- 2-year fixed-rate bonds – issued monthly,
- 3-year discount bonds – issued every other month,
- 5-year discount bonds – issued every other month,
- 5- or 10-year fixed-rate bonds - issued monthly,
- 10-year retail floaters,
- 15-year floaters - issued every six month,
- 5- or 10-year fixed-rate bonds - issued - issued every six month.

Therefore the excessive diversity of treasury securities should be highlighted. Such diversity, especially In terms of maturity, is widely spread among OECD countries [4, s. 181-197].

What is visible is that Japanese Ministry of Finance creates much lesser number of benchmark issues in comparison with another main OECD countries. Japanese benchmarks are also much smaller than American, British, Italian even German benchmarks. Such issues in Japan are more comparable with Canadian benchmarks (Table 1). Japanese issue policy is characterized by domination of small non-benchmark bond issues [25, s. 164]. Such preferences lead to restricted level of liquidity of the Japanese treasury securities markets.

Electronic Trading Systems – ETS gained popularity in the Japanese market relatively late. The ETS expansion At the cost of traditional mans of communication such as the telephone or fax Has been one of the markers of the changes taking place In most developed markets In the last few decades,. The first electronic trading systems in the Japanese treasury securities secondary market were created just in June 2000. Those were eXpress and eJGB. Nowadays there are 7 functioning electronic trading systems, including 4 interdealer systems. All these systems were founded by foreign companies. Unfortunately, the turnover in electronic ETS has been still insufficient [16].

Table 1. Characteristics of Treasury Securities Markets -comparison of a number of selected OECD countries

| Detailed list | USA | Japan | Germany | France | Italy | Great Britain | Canada |
|---|---|---|---|---|---|---|---|
| Number of benchmarks | 7 | 1 | 4 | 7 | 5 | 3 | 7 |
| Average amount of benchmark issue (billion USD ) | 17,5 | 7,7 | 8,3 | 2,8 | 12,3 | 18,2 | 6,7 |
| Spread's – 10 years bonds „on-the-run" | 3,1 | 7 | 4 | 10 | 6 | 4 | 5 |
| Spread's – 30 years bonds „on-the-run" | 31,1 | 16 | 10 | 24 | 14 | 8 | 10 |
| Turnover per year to debt outstanding (billion USD) | 22,0 | 6,9 | b.d. | 33,8 | 7,7 | 7,0 | 21,9 |

Source: [23, s. 164].

Insufficient liquidity, as a consequence of above mentioned factors, is the main problem of Japanese treasury securities market. What is well known is that, the most popular measures of market liquidity are the following: spread's range as well as, the relation between the spot market and future market turnovers and bonds turnover on the secondary market in relation to the level of outstanding public debt. When it comes to the spreads, they are the widest among G7 countries. Whereas the other two factors are the lowest (Chart 1).

What should be treated as an important limiting factor of market liquidity is dominating the Japanese market, the „buy and hold strategy". Thee fact of quasi-public institutions (executing buy and hold investment strategy), taking significant part in government securities market, also contributes to limiting market liquidity [25, s. 1-14; 29].

Transparency of the Japanese public debt management is not sufficient . We even don't know the exact level of all liabilities of the Japanese Empire. What is well known is only the level of central government debt. Remaining parts of gross public debt are known only approximately. Only two years ago Japanese government started regular consultation with institutional investors [4, s. 181-197].

Most OECD countries issue retail bonds to make investor base more diverse. Japanese government started issuing such bonds just in February 2003. Japanese government bonds structure is still highly dominated by commercial banks [4, s. 193-197].

## 5. Concluding comments

Public debt management is one of the most important activities of governments in OECD countries. Since the 1970s we have witnessed the transformation of operational public debt management in the most OECD countries. This involved a change in the methods and instruments of acquiring loan funds and of controlling the existing debt. It also included institutional framework of operational public debt management.

Japan, which is the second biggest economy in the world, has unfavorable situation at the strategic debt management level as well as at the operational one. Over the last decade Japan has become the most indebted among OECD countries. There are also many problems connected with insufficient development of operational public debt management. Thus Japan has to improve public debt management at both levels.

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# ZARZĄDZANIE DŁUGIEM PUBLICZNYM W KRAJACH OECD – STUDIUM PRZYPADKU: JAPONIA


## Streszczenie

Przedmiotem niniejszego opracowania jest prezentacja i ocena zarządzania długiem publicznym w Japonii na tle zasadniczych tendencji w tym zakresie w krajach OECD. Przedstawiono w nim podstawowe pojęcia związane z zarządzaniem długiem publicznym. Następnie omówiono podstawowe kierunki zmian operacyjnego zarządzania długiem publicznym w krajach OECD. W kolejnej części opracowania zaprezentowano aktualną sytuację w zakresie zarządzania długiem publicznym w Japonii. W konkluzji wskazano na konieczność dokonania zasadniczej poprawy w zakresie zarówno strategicznego, jak i operacyjnego zarządzania długiem publicznym w tym kraju.