



# Joint Colloquium of the IACA, PBSS and IAAHS Sections of the International Actuarial Association

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## **Recent Trend of the Shift from DB Plans to DC Plans in the Corporate Pension Plan Area**

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# 1.Introduction

- Strong world-wide trend from“DB”s to “DC”s.
- Is this view definitely true?
- The paper verifies this trend using statistical data from Japan, U.S. and U.K.
- It discuss the current features of the trend and future development of corporate pension plans

## 2. Statistics from Japan, U.S. and U.K.

### (1) Japan

#### Historical Review

- Only DB Plans were available until 2000
- DC Plans were introduced in 2001
- DC Plans have been steadily increasing, and they make up 15% of participants and 3% of assets. The majority are still DB-type plans.

## 2. Statistics from Japan, U.S. and U.K.

### (1) Japan

**Table 1 No. of Pension Plans, Participants and Pension Assets in Selected Japanese Corporate Pension Plans (As of November 1, 2007)**

<u>Plans</u>	<u>No. of Plans</u>	<u>No. of Participants</u> (Million people)	<u>Pension Assets</u> (Trillion yen)
EPF	636	4.84	32.8
DBCPP (Fund Type)	617	4.30	22.4
(Agreement Type)	2,058		10.3
TQPP	38,885	5.06	14.1
DCPP (Corporate Type)	2,472	2.50	2.8

## 2. Statistics from Japan, U.S. and U.K.

### (1) Japan

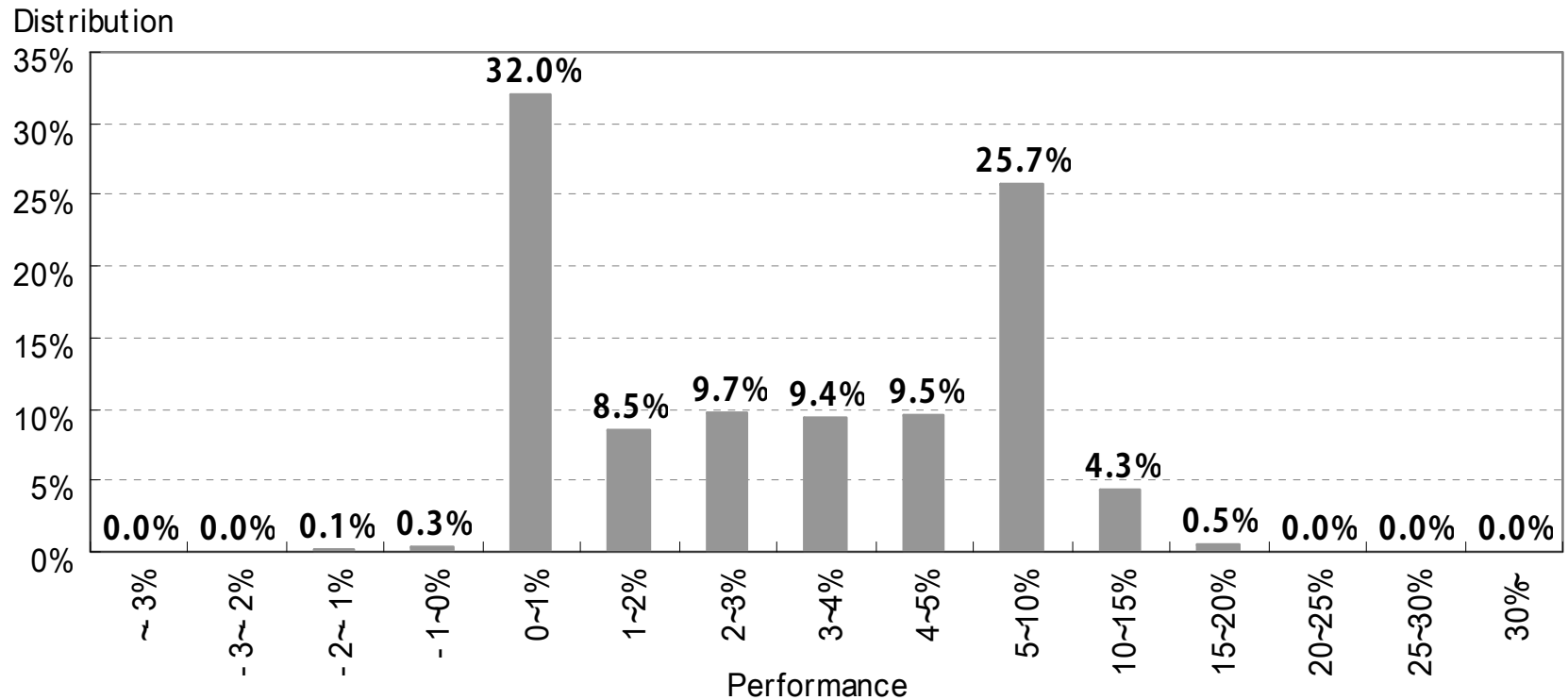
#### Features in Japanese DC plans

1. Three quarters of DC plans have been established with pension assets transferred from DB plans (Kuwahara 2006). DC plans have been introduced in large corporations which previously had DB plans.
2. 37.6% of corporations provide DC plans only and 62.4% have a combination of DC and DB plans. Whilst many SMEs introduced DC plans only, large corporations are likely to use both DB and DC plans.
3. Both “investment education” and “ongoing investment education” are introduced .
4. Investment behavior is polarized.

# 2. Statistics from Japan, U.S. and U.K.

## (1) Japan

**Figure 1: Distribution of Individual Investment Performance in DC Plans (As of March 2007)**



## 2. Statistics from Japan, U.S. and U.K.

### (1) Japan

#### 1. Reasons to adopt DC plans

- To avoid the burden of pension finance,
- To introduce/strengthen performance-based pay, and
- To secure portability.

#### 2. Reasons not to adopt DC plans

- Heavy cost of investment education for DC participants,
- To avoid transferring investment risk to DC participants,  
and
- High management and investment costs.

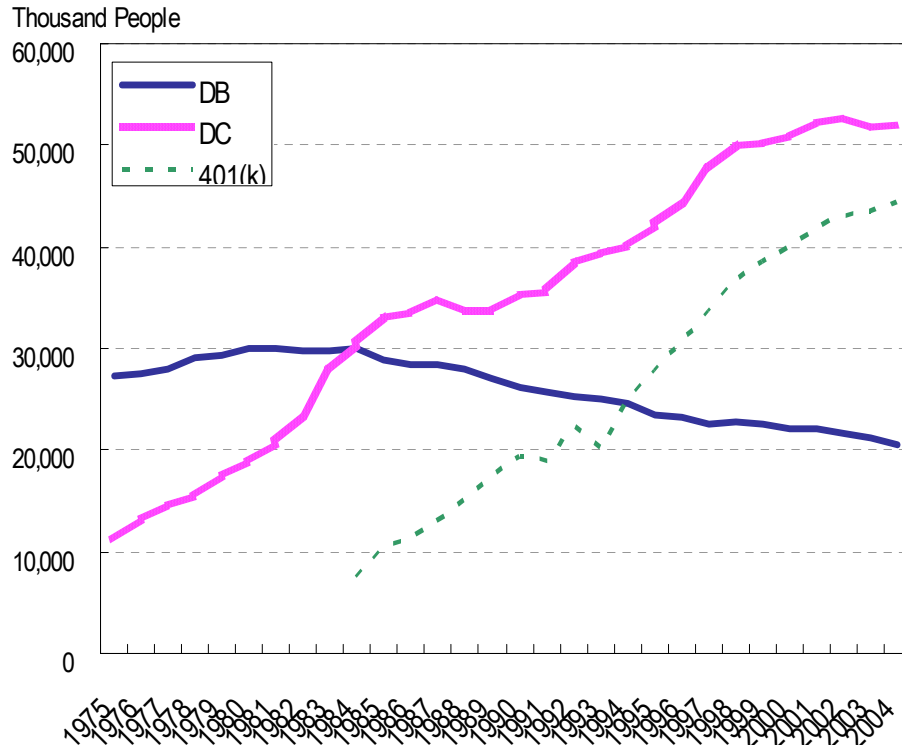
## 2. Statistics from Japan, U.S. and U.K. (2) U.S

### Historical Review

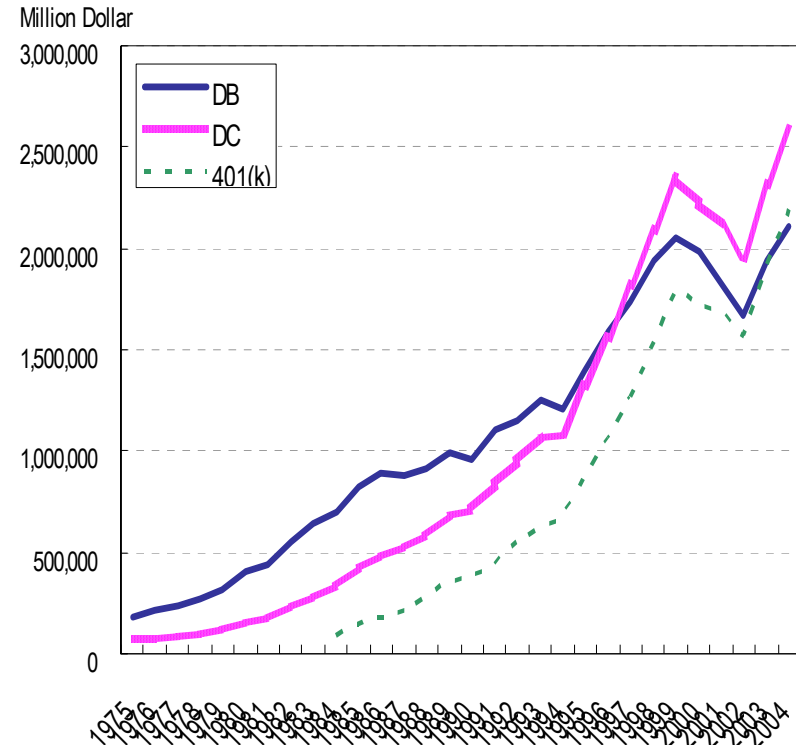
- The 401(k) was created in 1978.
- Benna's interpretation was realized in 1980.
- DC plans spread in 1980s and 90s.
- #Participants DC greater than DB in 1984,  
#Assets in 1997.

## 2. Statistics from Japan, U.S. and U.K. (2) U.S.

### Figure 2: No. of Participants

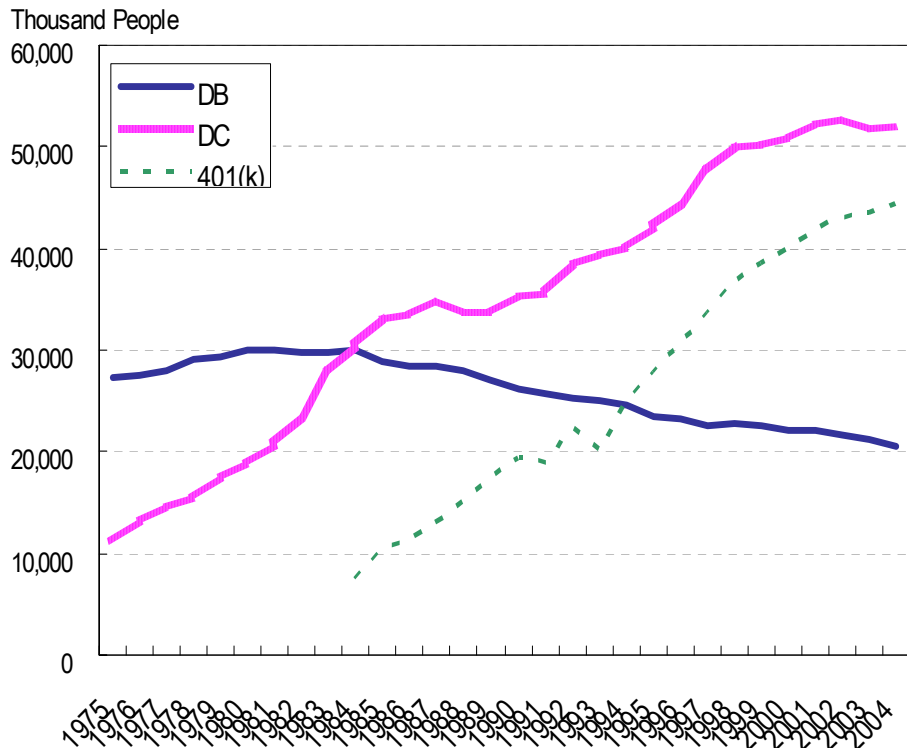


### Figure 3: Asset

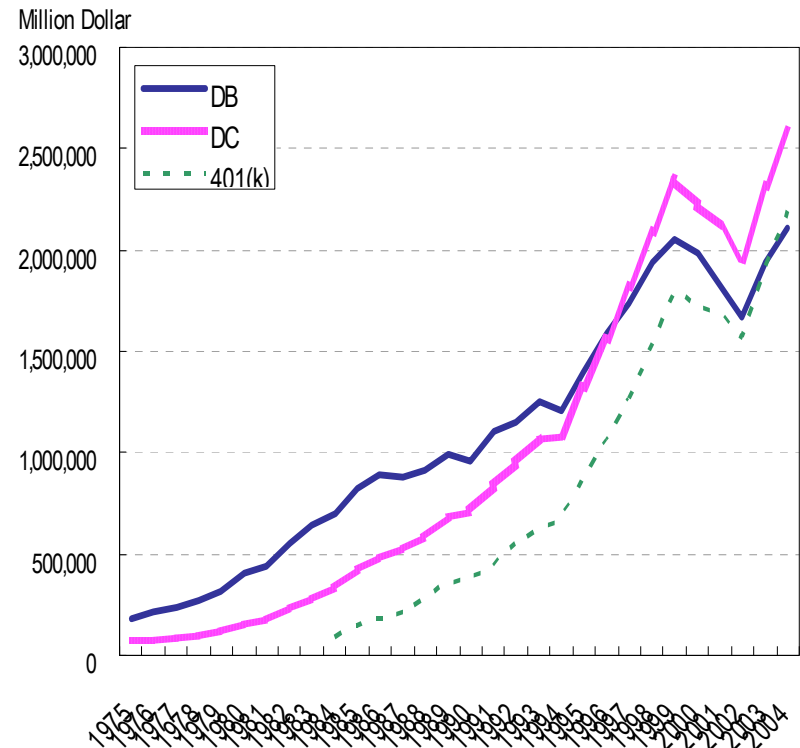


## 2. Statistics from Japan, U.S. and U.K. (2) U.S.

**Figure 2: No. of Participants**

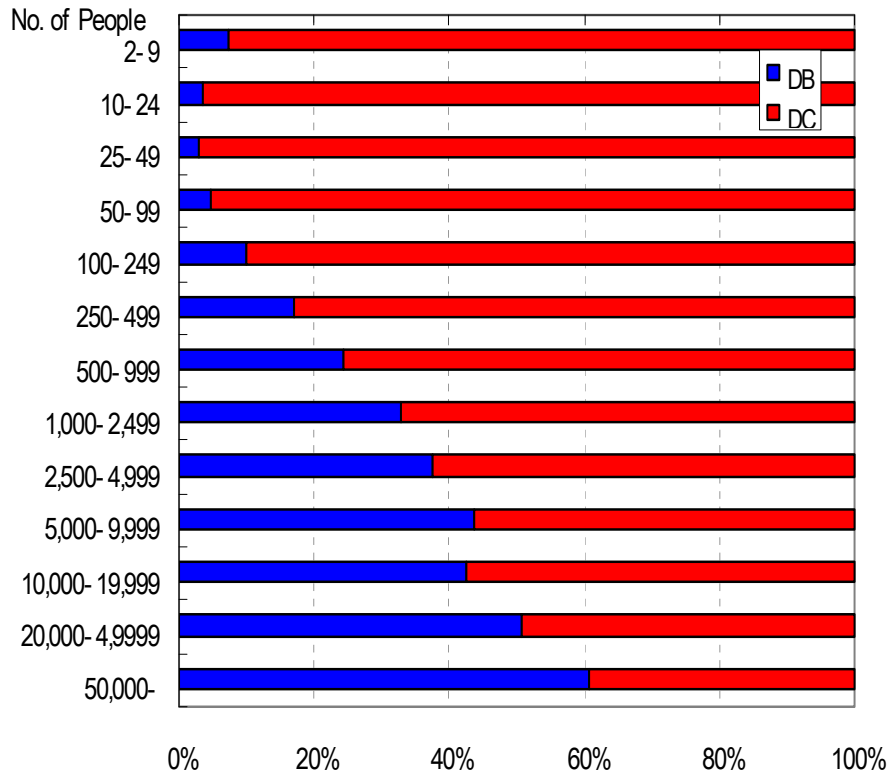


**Figure 3: Asset Amounts**

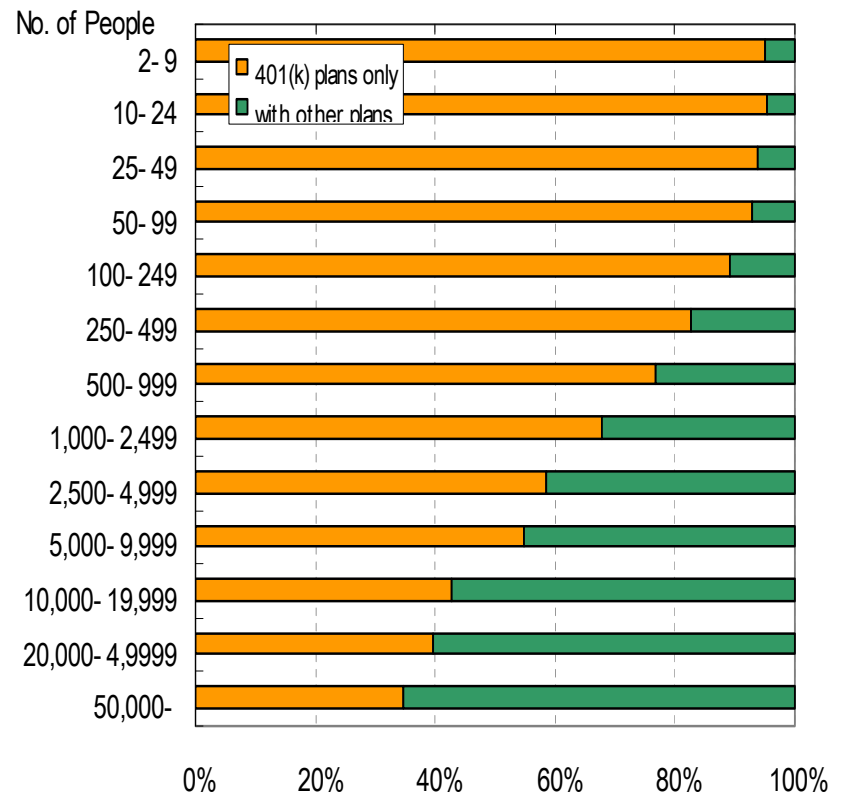


## 2. Statistics from Japan, U.S. and U.K. (2) U.S.

**Figure 4: The Distribution of DB and DC plans by**



**Figure 5: The Situation of Introducing 401(k) Plans**



## 2. Statistics from Japan, U.S. and U.K. (2) U.S

### Recent Features

- Recent surveys show that DC participants do not necessarily make their investment decisions rationally.
- Default funds : From GB/Deposit To Life cycle Funds  
/Target year Funds
- PPA of 2006
  - Automatic enrolment
  - Default Contribution Rate

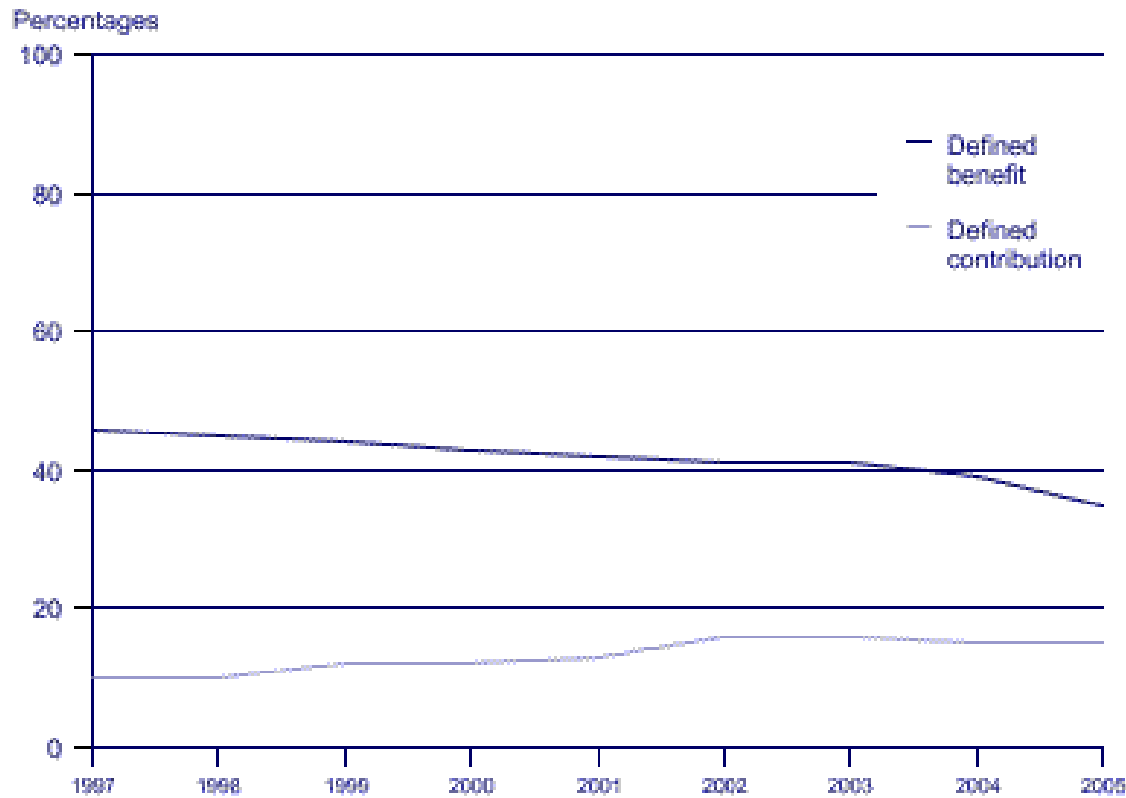
## 2. Statistics from Japan, U.S. and U.K. (3) U.K.

### Historical Review

- Final Salary DB Plans until 1970s
- Gradually shifted to DC Plans in 1980s and 90s
- Shift to DC from DB increased rapidly

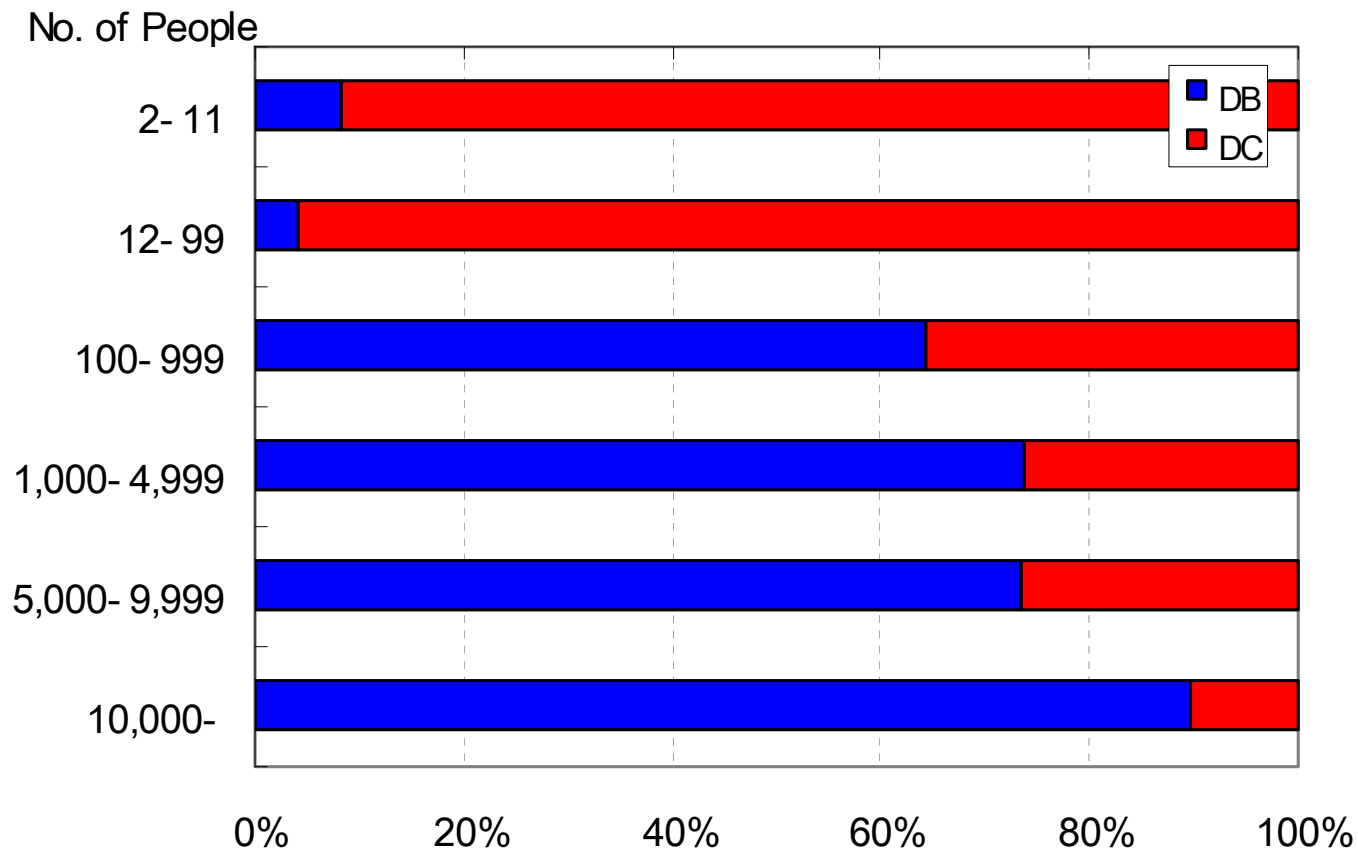
## 2. Statistics from Japan, U.S. and U.K. (3) U.K.

**Figure 7: Employee Membership of Occupational Pension Plans in U.K.**



## 2. Statistics from Japan, U.S. and U.K. (3) U.K.

**Figure 9: The Distribution of DB and DC plans by Number of Participants**



## 2. Statistics from Japan, U.S. and U.K. (4) World Wide

**Table 2: Dominated Corporate Pension Plans in Selected Countries (47 countries)**

	No. of Countries	Countries
DB plans (DB>DC)	15	Israel, Norway, Belgium, Japan, Germany, Philippine, Korea, Netherlands, Canada, Mexico, Taiwan, Finland, Portugal, Venezuela, Vietnam
DC plans (DC>DB)	29	Ireland, U.S., Demark, South Africa, Hong Kong, Brazil, Luxemburg, Malaysia, Czech Republic, Greece, Spain, Thailand, India, New Zealand, Turkey, Slovakia, Hungary, France, China, Russia, Argentina, Poland, Italy, Austria, Chili, Australia, Colombia, Singapore
Hybrid plans	3	Sweden, U.K., Swaziland

# Current Situation of DC Plans

- #DCs is increasing, #DBs is decreasing( JP,US,UK),
- DCs are introduced to SMEs( US, UK), Large corporations have DBs, DB+DC,
- Reason of the shift is Cost,
- DB plans are revalued( US), Inadequacy of retirement income( UK),and
- DC plans problems, turning pont

### 3. Features of the Shift from DB to DC plans

**(1) What social and economic conditions stimulated the shift from DB to DC plans?**

- **Contracting-out system**
- **Under-funding**
- **DB plan regulations**
- **Stock Market**

**(2) What types of corporations introduced DC plans more?**

- **SMEs—DCs, Large C—DBs, DB+DCs**

### 3. Features of the Shift from DB to DC plans (cont.)

#### **(3-1) Why did corporations introduce DC plans ?**

- **To avoid the increase in DB plan costs resulting from long -term deterioration of investment conditions and stricter DB plan regulations**
- **to introduce/strengthen performance-based pay or to secure portability**

#### **(3-2) Why did not corporations introduce DC plans ?**

- **The heavy burden of investment education**
- **Do not want to burden employees with investment risk**

### **3. Features of the Shift from DB to DC plans (cont.)**

**(4) Which type of plan is better for employees, DB or DC plans?**

**DB--seniority-based and lifetime employment**

**--employees to stay in office for a long time**

**DC--employees often switch their job**

**-- to manage pension assets on their own**

**(5) Will DC plans increase more in the future?**

**Discuss later**

### 3. Features of the Shift from DB to DC plans (cont.)

#### **(6) Which points should be reformed in DC plans? - Japanese Case**

- **Investment education**
- **Maximum contribution amounts**
- **Individual contributions**

## 4. Future of Corporate Pension Plans; Lessons from “Oxford Defined Benefit Plans Survey”

	<b>Japan</b>	<b>U.S.</b>
<b>Employer will play a less significant role in pension provision in 20 years</b>	<b>Disagree</b>	<b>Agree</b>
<b>Mobility and portability are more important than a generous DB plan for young employees</b>	<b>Disagree</b>	<b>Agree</b>
<b>Increased market competition stemming from deregulation and globalization has weakened the competitive position of corporate plan sponsors with large pension liabilities</b>	<b>Agree</b>	<b>Agree</b>
<b>There is significant resistance to restructuring the DB pension system</b>	<b>Agree</b>	<b>Agree</b>
<b>DB plans effects for future generations of workers expected to manage the burden of pension liabilities</b>	<b>Agree</b>	<b>Agree</b>

## 5. Concluding Remarks

- **We have discussed the recent trend of a shift from DB to DC plans by statistics available for Japan, U.S. and U.K.**
- **Many pension experts think that DB plans will continue in the future ( Oxford Survey)**
- **Problems of DC plans are becoming recognized , and The shift from DB plans to DC plans is not necessarily welcomed, and DB plans are likely to be revalued.**
- **It is desirable that mainstream retirement benefit plans should be DB-type pension plans , and**
- **we reconsider how to maintain DB plans for the future.**

**THANK YOU !!!**

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