## LECTURE 5: OLD AGE AND RETIREMENT PROTECTION

Instructor: Wong Hung

# Criteria for evaluating social security system/ Pension system

- □ Adequate (足夠保障)
- □ Affordable (可支付)
- □ Sustainable (可持續)
- □ Diversified (多元化)

## Adequate

#### □ Level

- Absolute poverty : subsistence / relative to price level (same purchasing power)
- Relative poverty: relative to income
- Relative to individual life chance:
  Replacement ratio

## Adequate

- Coverage
  - No. of eligible/ benefited people
  - □ % of eligible/ benefited people
  - Take up rate
  - Selective: is the targeted population really benefited
  - Universal: who is excluded from the system

#### Affordable

- Impact to Tax system
- Equivalent tax rate
- Impact to disposable income of households
- Anti-economic cycle vs. synchronize with economic cycle
- Administrative and Management Cost

### Sustainable

- Population Factor for inter-generational redistribution
- Political Factor for intra-generational redistribution
- Economic Factor for funded/ non funded scheme
- Social Factor: Trust, altruism

#### **Diversified**

- Different need imply different programe/ levels of protection
- Social Security as social risk management to diversified the risk not just the state, the community and the family can be the base of SRM

#### **Balance Functions**

□ A key policy issue for governments designing pension and social insurance systems is to balance re-distributive, savings, and insurance functions. Each pension pillar serves these three functions in different ways.

- public,
- □ pay-as-you-go,
- usually defined-benefit (20-30% average income of population) and
- □ Redistributive

- private,
- □ funded,
- almost always defined-contribution

- □ private,
- □ funded,
- voluntary,
- supplementary,
- preferably defined-contribution.

The first pillar addresses redistribution and social safety net issues directly, and provides basic support for everyone. In developing countries, "basic" support would typically mean subsistence-level assistance, whereas in developed countries it could mean assistance to provide at least a poverty threshold standard of living.

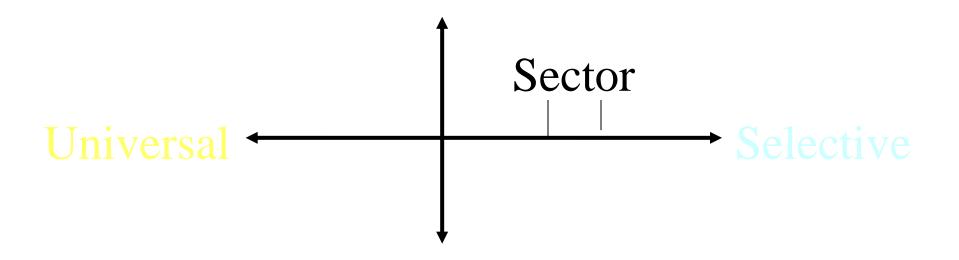
- provide retirement income above the poverty floor up to a level that society feels is necessary so that the elderly will not be a burden do to lack of income.
- should emphasize savings.
- non redistributory and fully funded, with decentralized control over the accumulated pension and savings reserves.

## **Multi-Pillar Pension Taxonomy**

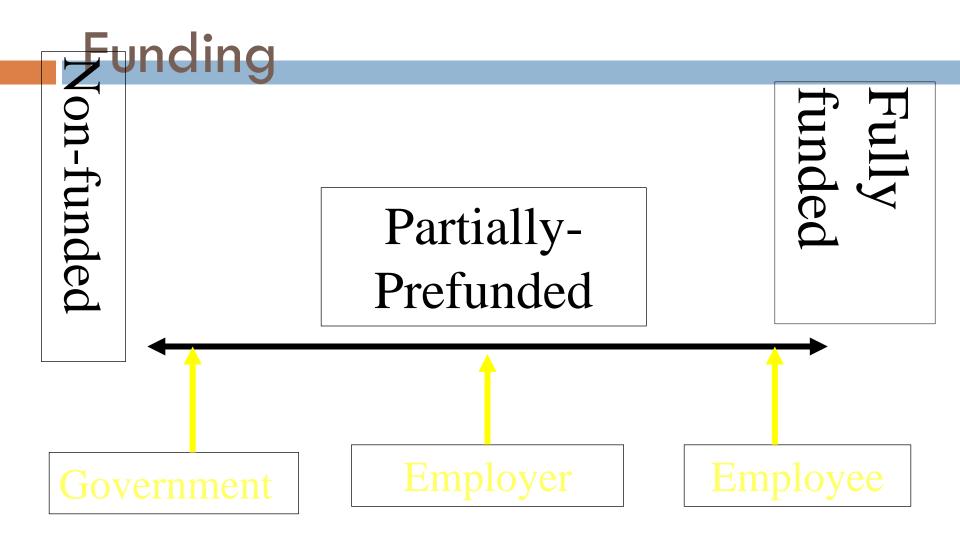
	Target Groups			Main Criteria		
Pilla r	Lifetim e Poor	Informa l Sector	Forma l Sector	Characteristics	Participatio n	Funding/collatera l
0.	X	X	Х	"Social Pension", at least Social Assistance, universal or means tested	residual	Budget/General Revenues
1.			X	Public Pension Plan, publicly managed, DB or NDC	mandated	Contributions, Perhaps with financial reserves
2.			X	Occupational or personal pension plans, FDB/FDC	mandated	Financial assets
3.	X	X	X	Occupational or personal pension plans, FDB/FDC	voluntary	Financial assets
4.	X	X	X	Personal savings, home ownership, etc.	voluntary	Financial assets

## **Debates and Choices**

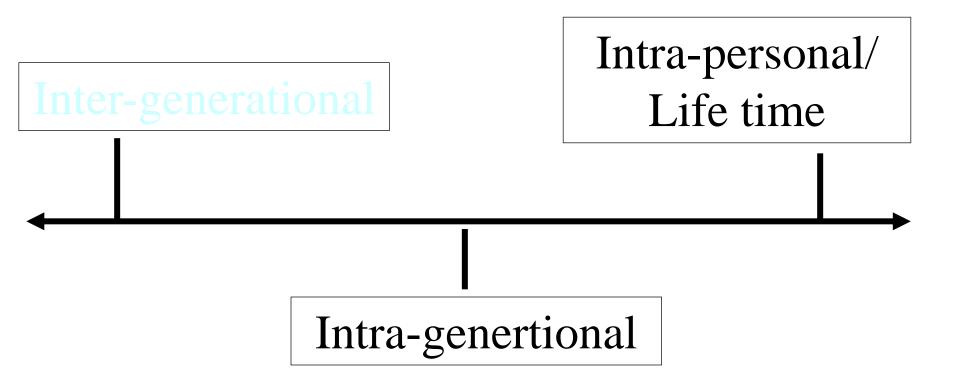
## Coverage



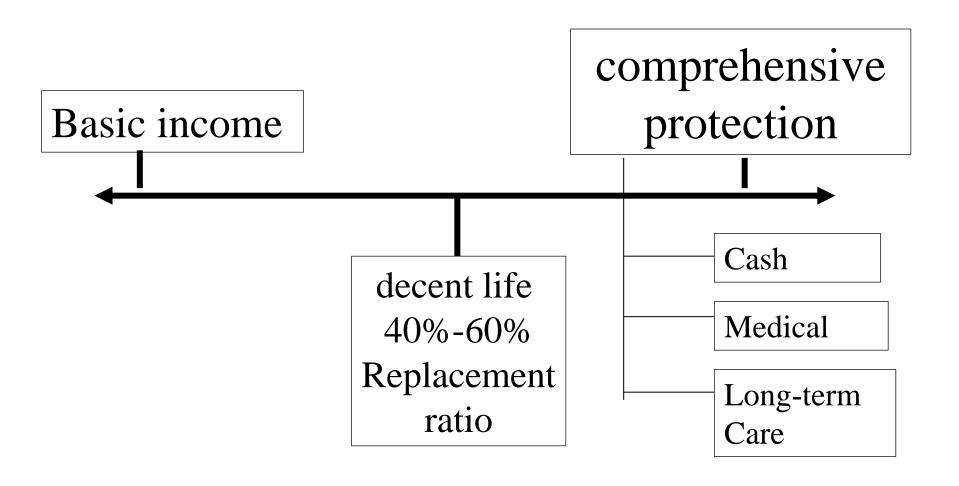
Eligibility (Age, Residency, Contribution)



#### Redistribution



#### Protection



## Funding / Protection

Defined Benefit

(指定利益)

Last Month Salary x

No. of Contributing/ Working Year x

Factor (2/3, 1, or 1.5 ...)

**Defined Contribution** 

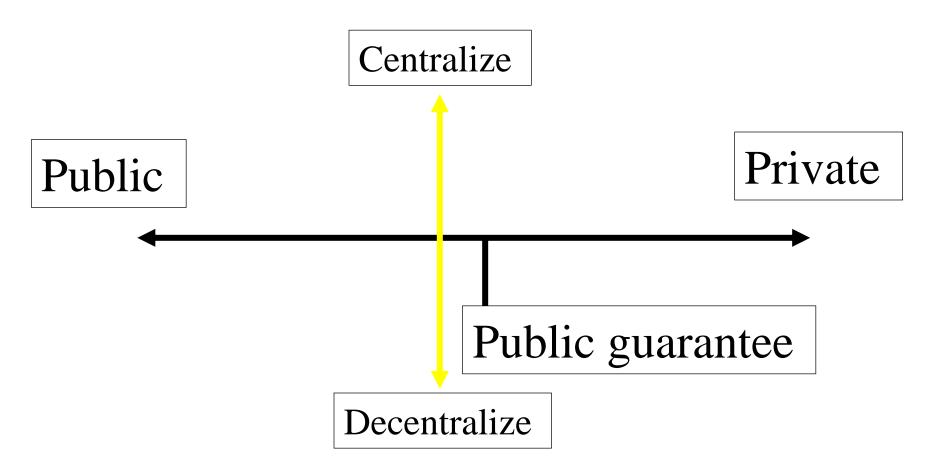
(指定供款)

Current Month Salary x

No. of contributing month x

Percentage (10%, 20%...)

#### Management



## Criteria to assess the system

- Maximum Coverage
- Adequate Level of Protection
- Financial Sustainability
- Political Viability
- Values: Social Justice and Human Right

#### Multi- components

 "A retirement income system based on different components and different financing mechanisms enables a better balancing of risks." (OECD, 2001)

#### **Privatization Reform**

- Over the 1980s, following the seminal reforms in Chile in the early 1980s, and with support from the World Bank, many nations have moved away from a public defined benefit pension system and toward a private defined contribution one.
- Important reforms in this direction have occurred in, among other places, Argentina, Bolivia, Columbia, Hungary, Kazakhstan, Latvia, Peru, Poland, Sweden, and Uruguay

## Orszag and Stigliz (1999)

- Rethinking Pension Reform: Ten Myths About Social Security Systems
- Arguments against such privatization reform

#### Macroeconomic myths

- Myth #1: Individual accounts raise national saving
- Myth #2: Rates of return are higher under individual accounts
- Myth #3: Declining rates of return on pay-as-you-go systems reflect fundamental
- problems
- Myth #4: Investment of public trust funds in equities has no macroeconomic effects

### Microeconomic myths

- Myth #5: Labor market incentives are better under individual accounts
- Myth #6: Defined benefit plans necessarily provide more of an incentive to retire early
- Myth #7: Competition ensures low administrative costs under individual accounts

#### Political economy myths

- Myth #8: Corrupt and inefficient governments provide a rationale for individual accounts
- Myth #9: Bailout politics are worse under public defined benefit plans
- Myth #10: Investment of public trust funds is always squandered and mismanaged

## Four aspects of a pension system

- Privatization. Privatization is the replacing of a publicly run pension system with a privately managed one.
- Prefunding. Prefunding means accumulating assets against future pension payments. Prefunding can be used in a broad or narrow sense.

## Four aspects of a pension system

- Diversification. Diversification involves allowing investments in a variety of assets, rather than government bonds alone.
- Defined benefit versus defined contribution: Defined benefit plans assign accrual risk to the sponsor; conditional on a worker's earnings history, retirement benefits are supposedly deterministic. Defined contribution plans, on the other hand, assign accrual risk to the individual worker; even conditional on an earnings history, retirement benefits depend on the efficacy with which contributions were financially managed.

# Any combination of these four elements is possible.

- Indeed, in practice, all of these elements contain spectra of choices -- making it particularly important to examine specific institutional details.
- An idealized model is likely never to be realized in practice and choices are inevitably characterized by degrees of gray rather than being black or white.

# Inherent features versus imperfect implementation.

A key issue surrounding both public defined benefit systems and individual accounts is which elements are inherent to the system, and which elements are merely common in how that system has been implemented in practice.

## Tabula rasa choices versus transformation choices

- In evaluating the effect of pension reform, initial conditions are important. In particular, one must be careful not to confuse the issue of whether a *shift* to individual accounts would be socially beneficial with the separate issue of whether,
- in a tabula rasa sense, an individual account system would have been preferable to a public defined benefit system in the first place.

## Inter-generational analysis

- Politicians are known for focusing exclusively on the short run, ignoring the long-run costs (or even viability) of public programs.
- In analyzing transitions and reforms, however, we have to be careful not to be make the opposite mistake: focusing exclusively on the long run, and ignoring short-run costs.

#### Ultimate focus on welfare

- In a similar vein, we need to keep in mind our ultimate objective. Savings and growth are not ends in themselves, but means to an end: the increase in well-being of members of the society.
- Thus, we could perhaps induce people to save more by exposing them to more risk. But that need not improve their welfare.

## Myth #1: Private defined contribution plans raise national saving

- "Prefunding" can be used in a narrow or broad sense.
- In its narrow sense, prefunding means that the pension system is accumulating assets against future projected payments.
- In a broader sense, however, prefunding means increasing national saving.

#### Privatization ≠ broad prefunding

- narrow prefunding has no macroeconomic implications; only broad prefunding offers the potential for macroeconomic benefits.
- privatization is neither necessary nor sufficient for broad prefunding.
- tradeoffs involved in how to prefund -- for example, through a public or private approach -are distinct from the tradeoffs involved in whether to prefund.

#### Apple vs. Apple

 Heller (1998) and Modigliani, Ceprini, and Muralidhar (1999) argue that a prefunded, public, defined benefit system may be preferable to a prefunded, private, defined contribution system

#### Myth #2: Rates of return are higher under

#### individual accounts

- A second myth is that rates of return would be higher under individual accounts than under a payas-you-go system.
- most simple rate-of-return comparisons conflate "privatization" with "diversification."

#### d(Return) = d(L) + d(P)

- Paul Samuelson showed 40 years ago, the real rate of return in a mature pay-as-you-go system
- is equal to the sum of the rate of growth in the
   labor force and the rate of growth in productivity

#### Misleading comparison

The simple rate of- return comparison is fundamentally misleading for two reasons:

#### administrative costs (行政費用):

- higher administrative costs reduce the net rate of return an individual receives.
- Myth #7 addresses administrative costs in more detail. administrative costs are likely to consume a non-trivial share of the account balance under individual accounts -- especially for small accounts.
- Such administrative costs imply that on a risk-adjusted basis, once the costs of financing the unfunded liability under the old system are incorporated (see below), the rate of return on a decentralized private system is likely to be *lower* than under the public system.

#### transition costs (改制/轉變費用)

□ Since individual accounts are financed from revenue currently devoted to the public social security system, computations of the rate of return under individual accounts need to include the cost of continuing to pay the benefits promised to retirees and older workers under the extant system.

### equity issues both within and across generation

The comparison of rates of return is thus misguided because higher returns in the long run can be obtained only at the expense of reduced consumption and returns for intervening generations.

#### diversification

 diversification undertaken through a public defined benefit system involves less financial risk for any given individual than diversification undertaken through a private defined contribution system

# Myth #3: Declining rates of return on payass-you-go systems reflect fundamental problems with those systems

□ This decline in rates of return from the earliest groups of beneficiaries is a feature of any payas-you-go system, under which the early beneficiaries receive very high rates of return because they contributed little during their working years.

#### Mature: stop falling

- The rate of return for subsequent beneficiaries necessarily declines.
- As the system matures, that decline in rates of return may be attenuated or exacerbated by changes in productivity and labor force growth rates

# Myth #4: Investment of public trust funds in equities has no macroeconomic effects or welfare implications

- it is about whether social security funds should be shifted into equities through any mechanism -either through public trust funds or private accounts.
- In other words, the issue is purely one of whether diversification per se is beneficial.

### Myth #5: Labor market incentives are better under private defined contribution plans

- We are ultimately interested in welfare, not labor supply. It is possible to design.
- structures that accentuate labor market incentives but reduce welfare.
- A key tradeoff exists between redistribution and incentives. It is usually possible to provide stronger incentives only at the cost of less redistribution. Redistribution typically creates labor market distortions.
- given other distortions in the labor market (e.g., a progressive tax system), assessing how specific provisions of a pension program affect the efficiency of the labor market is a complicated matter.

#### Conclusion

Underfunded public pension systems represent a potential threat to the fiscal soundness -- and, more broadly, economic stability -- of many developing countries. The World Bank's study, Averting the Old Age Crisis, provided an invaluable service in drawing attention to this problem and in discussing specific policy changes to address the issue.

#### Swinging to the opposite

Unfortunately, as often happens, the suggestions have come to be viewed narrowly -- focusing on a second pillar limited to a private, non-redistributive, defined contribution pension plan.

#### Non conclusive

most of the arguments in favor of this particular reform are based on a set of myths that are often not substantiated in either theory or practice. A move toward privately managed defined contribution pensions may or may not have an adverse effect on savings, welfare, labor supply, or the fiscal balance.

	綜接	強制性公積金	老年退休金	
資金來源 Funding	非供款式 Non-funded 由一般稅收支付	完全预筹积累 Fully-funded 僱主: 5% 僱員: 5% 自僱: 5%	現收現付式 (Pay As You Go, PAYG) Non-funded 部分预筹积累式 Partially pre-funded 勞資官三方供款 2.2.2. 方案 3.3. 方案2.5 2.5 方案	
性質	社會援助 social assistance	強迫儲蓄 compulsory saving	社會保險 social insurance 「專款專用、隨收隨支、以收訂支」	
再分配/轉移	貧富之間的財富 再分配 "照顧最不能自 助者"	人生不同階段的再分配 "積穀防飢"	跨代之間的再分配 "由下一代人養上一代人"	

受保障人士	60歲過 查窮 住位 長處以經 的 長為 定的 長 為 定的 人	65歲以上 僱員和自僱人士 僱員是指在僱傭合約下連續受僱不少於60日的 全職及兼職僱員。	所有65歲以 上人士
不受保障人士	不符及審貧上者家而入於的合資查線的)同家息標長人產病之長 住庭高準者	家庭主婦,低薪(5000元以下)人士不受保障; 屬於以下任何一類的人士,即屬豁免人士,毋 須參加強積金計劃: -家務僱員; -自僱小販; -獲法定退休金計劃或公積金計劃保障的人士 (如公務員和津貼及補助學校教師); -獲發豁免證書的職業退休計劃的成員; -來港工作不超過13個月或已獲得海外退休計 劃保障的海外人士; -受僱於駐港歐洲聯盟屬下的歐洲委員會辦事 處的僱員。	居港少於 年 己移居外地

保障水平	供款40年 替代率(replacement rate) = 20%	每月 三千元的老年退休金 有關金額與物價指數掛鈎 符合現時綜接資格的長者,可 繼續享有租金及醫療津貼。
供款來源	自僱人士亦須按其有關入息的5%供款,可選擇按月或按年供款。 入息上下限 強制性供款額設有入息上下限,分別為20,000元及5,000元。 如僱員月入少於5,000元,他便不用供款,但僱主仍須按該僱員的入息的5%作供款。如僱員月入超過20,000元,僱主僱員只須各自按20,000元的5%供款,即各供1,000元。上下限亦適用於自僱人士。	社聯2004方案: 將現時強積金百分之十的供款 減至百分之四,而將僱主及 僱員最高約百分之六供款, 加上政府的老人綜接及高龄 津貼現時的開支,轉為「老 年退休金」。變成partially funded 的計劃