

Translation to English of the Presentation to the Presidential Advisory Council on Pension Reform by Salvador Valdés-Prieto

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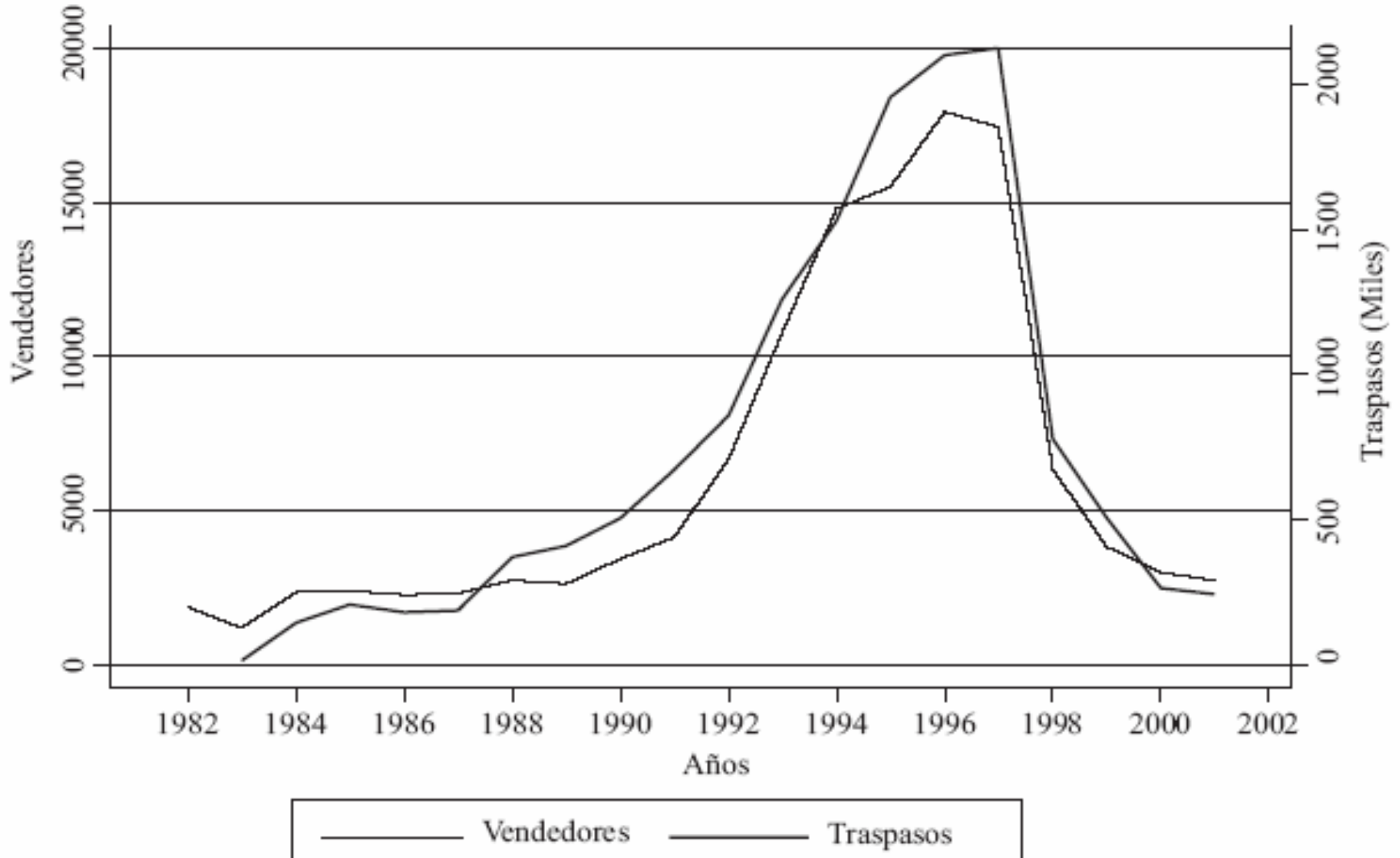
**Presentations made April 11 and 19, 2006 , Santiago, Chile
Plus some corrections and clarifications**

Part I: How to Improve Competition in the AFP Industry

(to see Part II: ***SOLIDARITY Pillar and Coverage: Evaluation, Projections and Proposals***, jump to slide 35)

Diagnosis

Competition Regime (1981-82 and 1991-97): not in prices, but in salespeople.



Diagnosis

Regulations prevented competition in prices.

- 1. The law requires that commissions be a single rate, as a % of earnings, for all participants with a contract with a given AFP.** As earnings vary by a factor of 10 among participants in a given AFP, and marginal costs vary much less, this law imposes price discrimination, with the aim of redistribution.
- 2. The law bans price-plans where an AFP gives a cash down-payment to the new client in exchange for a commitment to pay regular commissions for some time period.** As participants that are better informed and better bargainers are those of higher earnings and those at large employers, poor participants and those at Small and Medium Enterprises would lose if these price-plans were allowed. Banned to support redistribution too.

Competitive response in 1991-1997 period:

Sidestep these regulations: as the Superintendency can't verify whether salespeople give gifts (cash or goods) to participants that switch AFP, the AFP transferred the gift-giving function to salespeople, to avoid these regulations.

Gifts are at the same time a “devolution of excess commissions” and a cash down-payment.

- One side effect is abnormal reliance on salespeople (in 1996 there was 1 salesperson for every 150 contributors).

Diagnosis: However...

- a) **The 20.000 salespeople are expensive.** In 1996 the fees for salespeople added to **1.00% of covered earnings**. This is equivalent to a reduction in pensions from 77% of last wages to 70%. (if a 10% contribution rate financed a replacement rate of 70%, then a contribution rate of $(10 + 1.00)\%$ would finance a replacement rate of 77%).

If the contact cost fell (say, because commercial bank networks or other networks were cheaper per switch than salespeople), the margin (P- Mg Cost) would be dissipated also, although probably in other ways, i.e. by cross selling the AFP service jointly with other bank services given below cost (joint marketing). “Devolution of excess commissions” to high-earners would also be attained.

- b) **Gifts by salespeople and joint marketing are regressive, because they undo a desired redistribution.**
- c) **The AFP whose clientele has the smallest average earnings must charge the highest commission rate to cover the same costs => another regressive result. In addition, those AFP whose clients have average earnings above the smallest get a windfall profit when charging the same commission rate.**

Diagnosis: However...

d) As expenditure in salespeople and in joint marketing is chosen independently of the number of participants => it operates as a fixed (of course sunk) cost => creates economies of scale => concentrates the AFP industry (modeled by Sutton, 1991).

As the size of overall pension fund in Chile approaches 100% of GDP, concentration in AFP industry => market power for the 2 largest AFPs in financial mkt. + risk of abuse by the 2 conglomerates that control the 2 largest AFP and a commercial bank.

=> This source of concern about concentration in the AFP industry is *separate* from high commissions.

¿Solutions? Not obvious in 1997.

Diagnosis

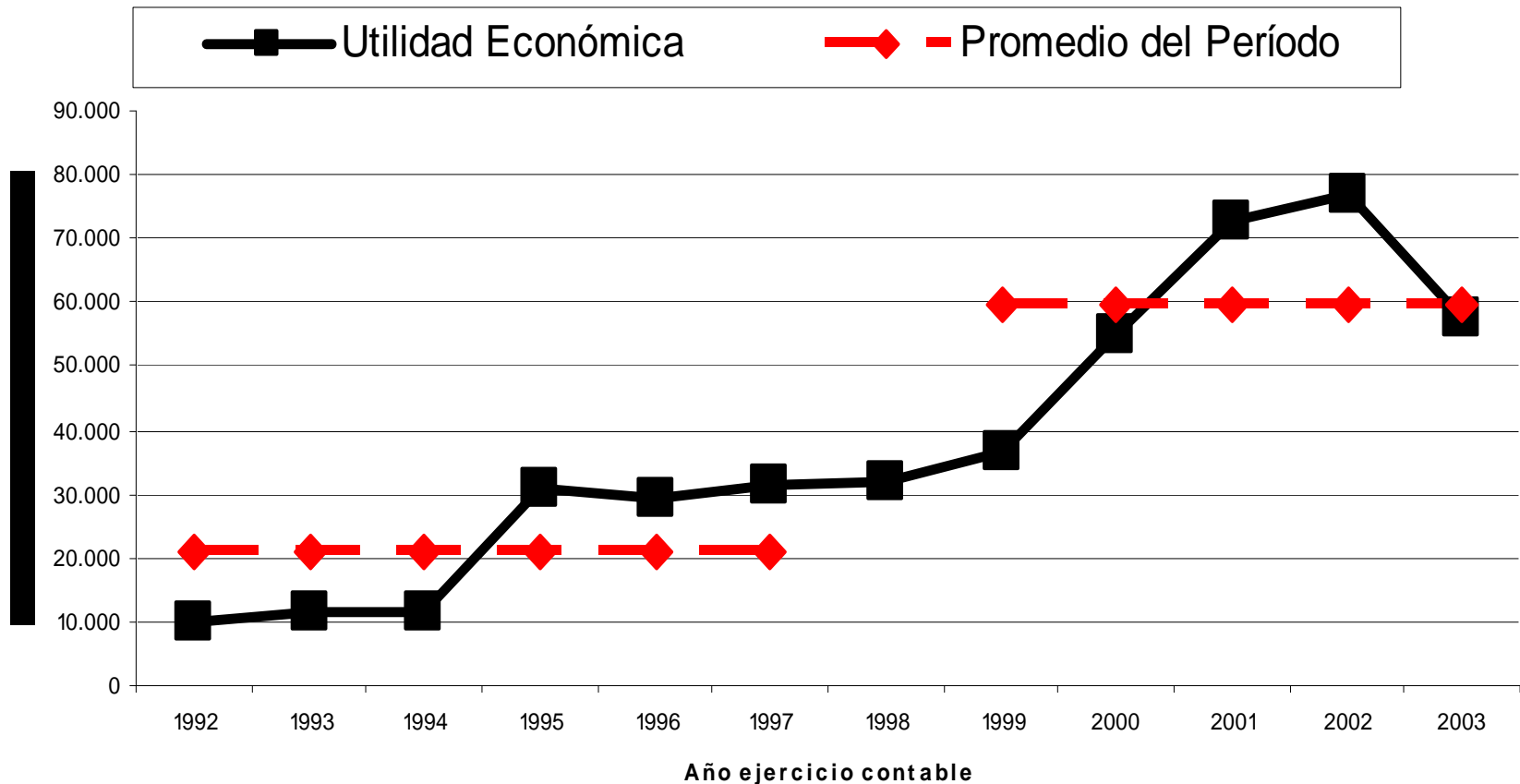
Low commercial competition regime (1998-?)

Somebody devised the following solution in 1997: **the government would support informally** a tacit agreement between the AFP to fire salespeople, in exchange for cutting the commission rates to participants.

- Ex.: Circular 1.051 of Superintendency ordered each AFP who wished to hire a salesperson, to report the fact to each of its rivals, at least 1 month in advance.
- Immediately, 17.000 of the 20.000 salespeople were fired. This situation continues until today (only 1/6 of the salespeople of 1996 remain).
- Competition between AFP did survive regarding high earners. Joint marketing only for them.

Diagnosis

Utilidad Económica de la Industria de AFP: Chile 1992-2003



Although salespeople fee expenditure fell 85%, there was a large increase in economic profits for the AFP industry in 1999-2003 as compared to 1992-1997. Why? The AFP passed along to participants only 1/2 of cost savings.

Diagnosis

Why entry did not reduce profits, starting in 1998?

Fact: there has been no entry to the AFP industry from 1995 to the present.

- **Only since 2004 entrants have been deterred by “regulatory uncertainty” (a high chance of reform).** In 1996-2003 there were large acquisitions of AFP, and those buyers **WERE NOT DETERRED BY REGULATORY UNCERTAINTY.** Those purchases prove that regulatory uncertainty was low until 2003. No new entry in 95-03 => other barriers
- **What salespeople quota would be given to an Entrant?** None. In response to entry, incumbent AFPs would suspend their agreement. Thus, the entrant knows that his entry would trigger a “salespeople war”, with a high cost for itself. This barrier did not exist before 1998, because the 1992-97 “war” was not triggered by entry, was a given.

Diagnosis

A 2nd barrier to entry emerged in 1998-2003: Drop in commission rates and reduction of the fixed cost coming from salespeople fee expenditure, raised the importance of **technological economies of scale** in *Basic Operations*.

A 3rd barrier to Entry, imposed by law :

- Pension law requires simultaneous entry to Financial Management and to Basic Operations (BO), but the technical “minimum efficient scale” is quite different among them. (At the same time, studies confirm that a part of the economies of scale DO NOT come from the technological side in BO, but rather from marketing expenditure, which performs the role of a fixed cost.)
- Other laws keep out important potential entrants, such as commercial banks and Cajas de Compensación. They are prohibited from having a wholly-owned subsidiary that is an AFP.

Diagnosis

¿Did the 1997 solution work? ¿Is it stable?

In favor: ½ of the cost savings from firing salespeople were passed along to participants. The equivalent replacement rate rose from 70% to 73.5%. (Let us assume that the savings on salespeople's fees was 1.00% of earnings, and that ½ was passed along. The new situation is equivalent to one with a contribution rate of $10 + 0.50\%$, so the replacement rate rises from 70% to 73.5%)

Against: three arguments against the 1997 solution:

1. High industry profits in 99-03 => **politicians are not happy, rather furious. They promote a reform.**
 2. **A suit filed in the Antimonopolies Tribunal against the AFP would be successful, in my opinion.**
Participants suffer abuse of dominant position since 1999. Also salespeople suffered abuse, when they were fired in 1997. As labor supply of salespeople was not perfectly elastic, inefficient.
- But, that Tribunal cannot provide remedies in this case. A legislative solution is needed.**

Diagnosis

3. Lobbying and Political risk: Some large AFPs may try to defend the high profits of 1998-? **by lobbying politicians with favors at the expense of participants**, in exchange for preservation of the status quo that yields high profits. Some enterprising politicians may demand these same favors.

¿Which favors? Bias AFP votes for members of the boards of the largest Chilean corporations (which are important donors to political parties). Also biased AFP vote in public offerings of shares. Also biased portfolio decisions, to engage in social investing, or even to to buy bonds issued by state enterprises.

Note that smaller AFPs **have** to follow the portfolio decisions of the two largest AFPs, because of the high concentration in the industry.

¿Impact of Political Risk over participant returns? **Potentially Enormous. If these biases worsen Chilean corporate governance and portfolios, the replacement rate could fall from 73.5% to 60% or 50%.** Example of political investment biases cutting returns by 400 bp: Sweden 1960-84.

Policy implications of this Diagnosis

1. **Free prices/commissions:** end to uniform commission rate regulation. Allow cash down-payments made directly by the AFP.
2. **Create a new explicit mechanism for redistribution.** It should distribute the cost of Basic Operations (BO) and Disability Insurance (DI), which add to 96% of total AFP cost, in proportion to earnings.
3. **Reduce concentration** (recall 2 justifications: (a) in **FMg**, to cut risks posed by financial conglomerates that control both a bank and one of the two largest AFP, and (b) to transfer excess profits to participants) **How?** Reduce scale economies caused by (i) Expenditure in salespeople or commercial contact networks, and (ii) by that law that requires BO to be delivered by the same firm that does fund management (FMg), which extends technological scale economies from BO to FMg.

Sounds adequate, but ¿how attain 2 and 3?

Policy implications of this Diagnosis

¿Does it help to allow separation (BO+DI)/FMg?

Concept: the contract with the participant would be owned by the “Pure AFP”, which does FMg and marketing. The pure AFP also has a commercial contact network and salespeople. She hires the BO.

Evaluation:

- A BO which doesn't have an affiliated pure AFP would negotiate its prices with just two or three buyers (2 or 3 pure AFPs). Buyer power => BO suffers high risk of expropriation of specific assets.
 - A large BO which does have an affiliated pure AFP has a large incentive to expropriate commercial data from any independent/new pure AFP, to benefit its affiliate. The independent pure AFP suffers a high risk of expropriation of specific commercial assets.
- ⇒ **Industry equilibrium is that only affiliate firms hire each other, i.e. quasi vertical integration replaces current vertical integration.**
- ⇒ **Simple separation would not make a difference.**

Policy implications of this Diagnosis

Which should be the new redistribution mechanism? The cost of BO of all the current AFP should be added and divided by the *national* covered wage bill, setting a single national commission *rate*. The cost of FMg and the cost of salespeople and commercial networks should be left out.

Then, each pure AFP would pay into a pool an amount equal to the product of this single national *rate* times the earnings of each client.

But, would each AFP draw from the pool its own costs to cover BO? ¡NO! This would allow each AFP to invent any cost. It would be a great incentive to inflate the reported BO cost.

=> It is essential to add an **objective** mechanism to determine BO costs. Without one, it is impossible to redistribute explicitly at the national level, as needed.

Policy implications of this Diagnosis

One possible objective costing mechanism (Valdés-Prieto, 2005):

- a. Allow each existing AFP to divest itself into a (BO & DI) firm and a “Pure AFP” which does FMg and marketing.
- b. Create a “BO Board” (BOB), made up of representatives of Pure AFPs, which would **purchase in common**, through bidding, the BO service with a 10-year contract, **for each geographical zone separately**.
- c. The sum of BOB expenditures in all zones would be financed nationally with a *single national rate*. Each Pure AFP pays the BOB the product of this single rate and the earnings of each of its participants.

My proposal to reduce Concentration: The bidder that wins in each zone would be an “open access facility” for all the Pure AFPs that operate in that zone. Sharing of technological scale economies is assured. **This is not a complete solution (yet) because the fixed cost caused by marketing expenditure can still be large.**

But, the diagnosis is Incomplete

Assume these proposals are applied. Now the commissions charged by the pure AFPs must be freed for all. (end to uniformity. Allow cash down-payments.)

Who dares to do so?

- **Bush Commission 2001 didn't. Netherlands neither.**
- *The Chilean Asociation of AFP doesn't dare, because it does not propose to free commissions. Others neither.*
- **M. Thatcher did dare in 1988 (U.K.) and Australia in part. Results:** two outcomes of the Mutual Fund industry was replicated: High commissions (about double those of the AFP) and 50% of costs are marketing expenditure (Murthi, Orzag, 1999). **Australia dared:** In the individual-contact market, commissions are three times those at group-contact segments (Bateman and Mitchell, 2001). **Created a residual AFP.**

But, the diagnosis is Incomplete

Key element missing in initial diagnosis: a substantial majority of participants choose not to become informed about AFP commissions. Why?

- Substantial complexity, for the 88% of employees who do not own voluntary mutual funds. You don't buy what you don't understand.
- Commission is subtracted from salary, so it never reaches the pocket => part of the incidence is shifted to the employer, who can't choose AFP. Salary slip does not report commission separately, and couldn't do so at the annual frequency.
- The commission amount is small in each month, so the decision to invest time and effort in comparing AFP prices can be delayed at low immediate cost.
- Switching cost can be large: either skip work to visit an AFP office, or save a statement that arrives by mail every 4 months (but HLSS02 survey says that only 45% receives and reads it).

But, the diagnosis is Incomplete

Evidence from HLSS 2002 survey

What is the amount of the fixed commission in your (last) AFP?
(correct ranges in blue)

Empirical evidence about decision to become informed about AFP prices :

- Price elasticity of entries and exits to an individual AFP was very low in 1993-97, for middle and low earnings. (Marinovic and Valdés, 2005).
- Other econometrics (Berstein- Ruiz 2005, Cerda 2005) confirm very low sensitivity to differences in commissions.

	Contributor	Non contributor	Total
Less than 500 pesos (%)	20,8	31,5	22
Range 500-999 pesos (%)	16,1	12,1	15,7
1000-1499 pesos	6,1	9,3	6,5
1500-1999 pesos	1,9		1,7
2000-4999 pesos	17,7	11,4	17
5000-9999 pesos	7,3	8,9	7,5 ¹⁹
10000-19999 pesos	9,8	15,1	10,4

The diagnosis was Incomplete

Conclusion: There is consensus that in this mandatory market with high information costs, free prices would yield a socially inefficient outcome (in terms of commission costs and concentration of FMg)

- **Omission by the authorities:** it knows that a large share of participants choose not to become informed, but forces them to purchase the service, at whatever price.

Proposal (Valdés, 2005): Create institutionalized expert help to find the cheapest Pure AFP. Target this help to participants who are likely to face the lowest incentives and opportunities to become informed about prices, i.e. those with an account balance under \$X million pesos. In their behalf, ask for bids to perform FMg for targeted participants. Other participants, and those that refuse help, continue choosing AFP on their own, as today.

Similar to proposal by Bush Commission (2001)

- This also eliminates economies of scale in the segment offered for bids, by substituting the large fixed cost originating in salespeople and commercial networks, for the cost of presenting a bid.

Proposal of Reform Path

Implementation? I propose a reform PATH which takes 1 year to implement. Idea is to create a pilot zone.

Stage 1A: Law authorizes each AFP to **divide itself in 2:**

- The “Pure AFP” has contract with some participants (and marketing expenditure) and financial management (FMg). **At division date, the Pure AFP hires its BO affiliate.**
- The “Basic Operator” (BO) receives
 - agency network to respond queries from participants
 - Collection of contributions, updating of individual accounts
 - Counseling to choose multifund and pension type (annuity vs. Programmed Withdrawal), Pays dues to SCOMP.
 - Benefit determination, pension payments,
 - **Provides group disability and survivorship insurance (DSI) coverage.** Inherits current DSI contract.
- **BO does not invest in marketing.** The Pure AFP has salespeople and may share agency network with other firms, such as banks.

Proposal of Reform Path

Pilot zone, for trial & error:

Start in Northern region (regions I to IV). 350.000 contributors (11,5%); 800.000 participants (11,1%).

- **Alternative:** choose a given subset of participants with a lottery and apply the pilot scheme to that set.
- **Geographical definition exploits network economies better in sparsely populated zones.** In high-density regions, the BO networks could be superimposed at little cost.
- **Stage 1B:** Law creates a permanent “Basic Operations Board” (BOB). Through the BOB, the pure AFP would purchase in common the BO & DSI service for their participants.
- **Membership of BOB:** majority are representatives of the Pure AFP. Minority are representatives from Superintendency + experts in ICT, chosen by Central Bank with merit competition.

Proposal of Reform Path

(Continuation of Stage 1B)

- Law allows the following firms to participate in consortia that bid to BBOB for the Northern region: BO divested from the old AFP, Mutuales de Seguridad, Cajas de Compensación, y and specialist firms.
- Banking Law reformed to allow banks to create subsidiaries that participate as bidders or in consortia.
- Winning consortium may sell other services to buyers different from the BOB, but subject to regulations to limit joint marketing of these other services.
- Winner must abide by obligation to keep the pure AFP away from commercial data on contributors.

Proposal of Reform Path

(end of Stage 1B)

- The contract signed with BOB specifies dozens of prices, one for each particular service.
- Contract specifies standards of service, including quality of customer service. Standards are both absolute and relative to the quality provided by future BO that will service other geographical regions.
- **Contract includes automatic adjustment of DSI insurance premium: lag of 6 months in adjustment to changes in payment experience in DSI at the national level. Lag of 24 months in adjustment to changes in payment experience in DSI at the regional level.**

Proposal of Reform Path

Stage 1C: Law grants “open access” to the BO service of the winning consortium, to any new (pure) AFP that has contracts in the Northern region, paying the same commission to the BOB. (open access is essential because each BO has a monopoly to serve a set of participants).

- Reform to the Banking Law: allow banks to create subsidiaries that are a **Pure AFP**, but they would be constrained to operate in the Pilot region alone for 1 year (transition period).
- **Superintendency starts trial and error with new regulations on joint marketing of Pure AFP service with other banking services.**

Proposal of Reform Path

Stage 1C (end):

- **Reform the law that governs *Banco del Estado* to endow its Pure AFP subsidiary, with special governance rules:**
 - Directors of the Pure AFP would be designated by Banco del Estado's board, but only from a limited set of candidates, which would be pre-selected by the Central Bank with merit criteria and a public competition. Position incompatible with Incompatible with party political activity in last 10 years.
 - Similar selection process with the members of the Investment Team, but candidates would be chosen by the Pure AFP's board.
 - Votes of this Pure AFP in public offerings (of stocks) would be decided only by the Investment Team

Proposal of Reform Path

- **Stage 2:** Law creates a **Search Service of the lowest-priced Pure AFP**, in the Northern Region (pilot zone).
- *This service is optional for each participant.* How? Law presumes that participants whose balance in the individual account is below \$X millions, demand this service, but each can reject it by sending a letter.
- **Search Service is managed by an Expert Panel (EPSS), made up of experts in financial management.**
- Majority chosen by the Central Bank in a merit competition. Remainder chosen by the Minister of Labor, from lists pre-selected by the Civil Service Commission.

Proposal of Reform Path

- **EPSS** requests bids for the financial management for users of the search service that reside in the Northern region.
- Contracts allocated for four years to the lowest two prices (for ex. both are allocated the price offered by the second lowest bidder). The commission rate set in this bidding is still a flat percentage rate of declared earnings. At the end of the 4 years, the EPSS offers these funds again for bids, but for three years. Then every 3 years there is a new bidding process.
- **Each pure AFP is authorized to charge a different rate to participants in the Northern region that DO NOT get the search service. Trial and error.**

Proposal of Reform Path

- A winner must offer management for the 5 multifunds. Each is subject to the current Relative Return band, which continues, and to the 1% reserve.
- A winner is allowed to contact additional participants on an individual basis, but success requires acceptable FMg.
- Add clauses in the contract that prevent winners from shifting the costs of FMg to second-level financial managers (Foreign Mutual F. managers), just because their charges are separate. Trial & error.
- **Improve Competition in the individual contact market:**
 - Allow each pure AFP to offer up to 3 price plans, each of them different,
 - One of the price-plans must be directly comparable with the rate over which the EPSS allocates the search service (a single rate on earnings, no flat (or “fixed”) fee per time unit).
 - The other price plans can include cash down-payments and permanence commitments.

Proposal of Reform Path

- **Stage 3 (1 year later): Extend stages 1 & 2 to other regions.**
- The BOB decides in how many regions will the country be divided (for BO & DI purposes). It may choose to superimpose concessions in a given region (say those with high population density).
- The BOB may also separate some BO service to contract for them separately, to specialist firms. If in any service the BOB finds that it faces a monopoly, it may ask the Antimonopolies Tribunal, to authorize the replacement of the bidding scheme for a tariff setting regulatory process.
- **The EPSS decides in how many blocks the participants that request the search service to choose a Pure AFP will be divided. If $X = \$10$ million, 10 blocks of US\$ 2 billion dollars fit. Bids are taken every 3 years, indefinitely and simultaneously.**
- **The single rate that each pure AFP must pay the BOB for BO services, is determined nationally now.**

Proposal of Reform Path

End of stage 3: Improve competition in the individual contact segment for Pure AFP:

- Adjust regulations on joint marketing between Pure AFP and affiliated companies (banks).
- **Create 401-k plans (APV Colectivo), expanding the 3rd pillar:** An employer offers matching funds to its workers subject to a permanence requirement. Allow employers and unions to provide the Search Service of the lowest-prices pure AFP, **but subject to new governance conditions:** external audit of the SS + a Vigilance Committee chosen by secret vote and with free entry to be a candidate.
- ¿Allow Pure AFP to charge a percentage of assets? Danger that mandatory savings may be extracted and then paid back to participants as cash down-payments. Acceptable only if the asset based fee is subject to a stringent ceiling.

A critical parameter for the EPSS

The presumption threshold X: Its level decides whether 1 million contributors with earnings under Ch\$350.000 (660 US\$/mo.) pay the marketing cost associated to individual contact. At the same time, the level of threshold X decides whether the segment where participants choose their Pure AFP covers **63% or 93% of the total pension fund**

Tamaño del segmento de contacto individual versus umbral de la presunción.
(supuesto: ningún afiliado actúa para modificar la presunción)

Umbral de presunción (Saldo cuenta individual):	\$2 millones	\$10 millones
% de los Fondos de Pensiones en el segmento licitado	7%	37%
Nº de bloques licitados, si c/u manejara US\$ 2 mil millones	2	11
Nº cotizantes de sueldo inferior a \$350 mil que recibe Servicio de Búsqueda	989 mil	1.927 mil
Nº de afiliados que recibe Servicio de Búsqueda	4.146 mil	6.295 mil
Nº de afiliados en el segmento de contacto individual	2.934 mil	786 mil
Nº de cotizantes en segmento de contacto individual	1.922 mil	610 mil

An unfounded objection

“The bidding contest for FMg will be won by bidders willing to save on the quality of FMg, to save costs. Participants will suffer”

Responses:

- **Requirements on FMg quality are NOT reduced in this proposal, as compared to today’s standards.** The relative return band continues operating, as today, on FMg identified through bids. **This band forces each Pure AFP to follow the portfolio choices of the 63-93% of funds owned by participants with more than \$X in their account, who continue choosing individually.** In addition, sales of the Pure AFP service in the individual contact segment, to high earners, will continue to be a function of FMg performance.
- **This is an opportunity to increase demands on the quality of FMg above today’s standards:**
 - Bidding contract can copy FMg contracts developed by pension trustees in the OECD over the last 50 years. If the experts at the EPSS deem it justified, they can insert performance fees – adjusted by risk to prevent risk-taking – into the bidding contract.

¿Apply the Mexican approach?

In the Mexican approach, there is no division between BO and Pure AFP. The Superintendency assigns the flow of new participants (young) to the integrated AFP that charges the lowest commission over the next 2 years.

- **In Chile, the flow of new contributors is just 4% of the total.**
- **Result 1 : Concentration would NOT be reduced. why?**
 - (i) the average account balance of new participants is ZERO; and
 - (ii) the fixed cost originated on marketing (salespeople and commercial networks) would remain for 96% of contributors. Technological economies of scale would also remain (In Chile they are more important relative to demand than in Mexico).
- **Favorable effects undone by the following dynamic strategy by financial conglomerates:** have 2 AFP: one for current clients (expensive), and one for new participants (cheap); + share BO and commercial network. Then, every 5 years merge the cheap AFP with the expensive one to raise the fees charged by the former, and create a new cheap AFP to participate in new allocations of new participants.

=> **Result 2: 96% of contributors, among which 2 million have a salary below 660 US\$/mo. would continue paying excess profits to the AFP.**

Part II:
***SOLIDARITY Pillar and
Coverage: Evaluation,
Projections and Proposals***

Why coverage? Which coverage?

- **Coverage of benefits:** what % of the old (over ages 60F/65M) receives income above
 - a) poverty line; b) replacement rate of 50%.
- **Coverage (and density) of contributions:** what % of employment contributes. It is of interest only in contributory pillar (obvious). There, density is ONE determinant of the replacement rate (another: returns).
 - Solidarity should never be evaluated using coverage of contributions!
 - Alleviation of improvidence should not be evaluated by cover. of contributions alone.

Combining the pillars: It may be good to combine high coverage of benefits above the poverty line (92% in 2004), with medium coverage of contributions (60%)³⁶

Coverage of Benefits in Chile in 2004

A. Solidary Pillar: coverage benef. = 38%

A.1 Assistance Pension: 15% of age group.

235.433 = N° PASIS old age + N° PASIS disability who belong to age group.

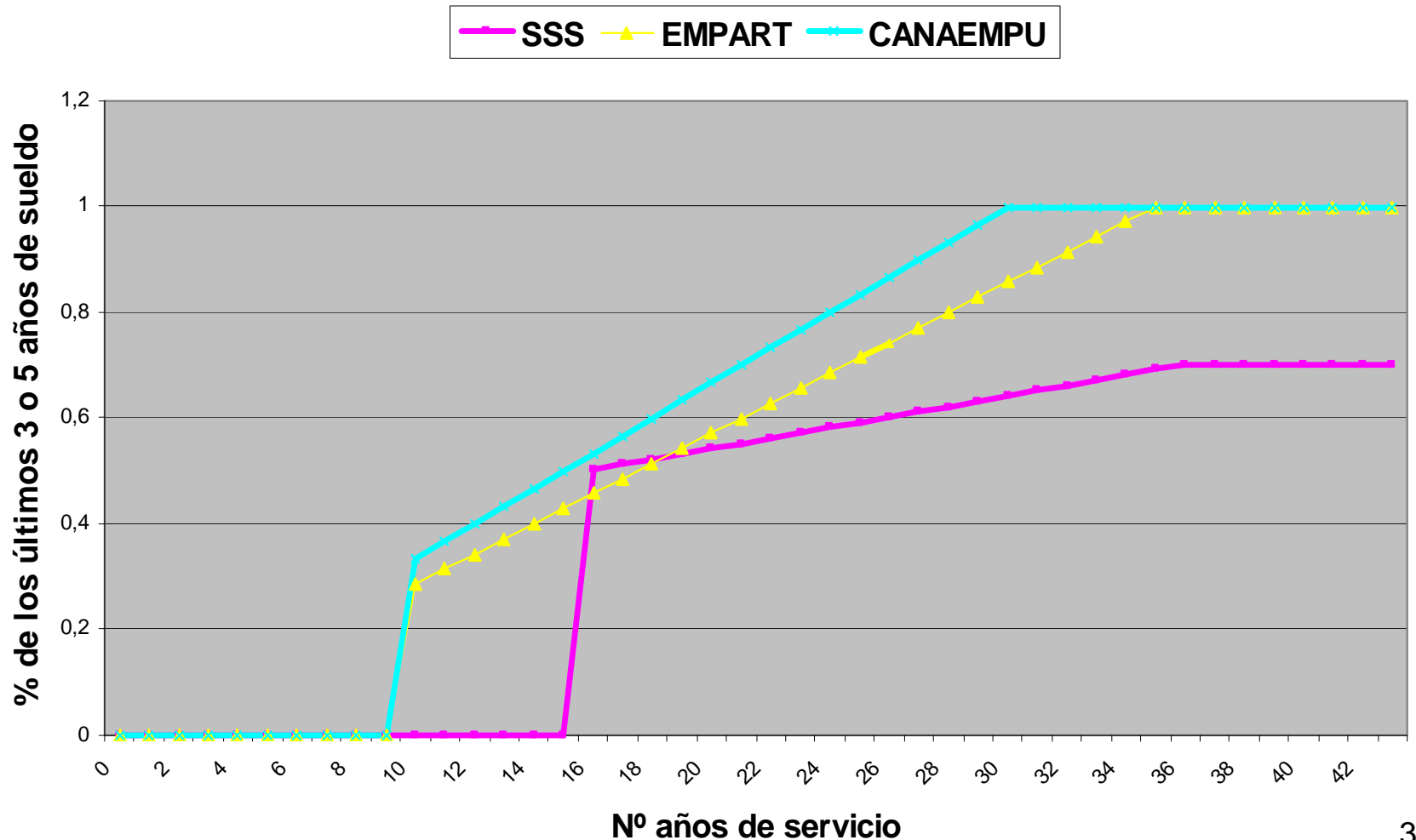
A.2 Minimum Pension Subsidy **of the Old System**
(complements the formula pension): 20%

Formula SSS = {50% + 1% \times (Years of Service -10)}
x (Av. Salary 5 years before issue)/1.2022
if years of contribution > 15.8; 0 if not.

A.3 Minimum Pension Subsidy **of the new System**
(complements the AFP pension): about 3%

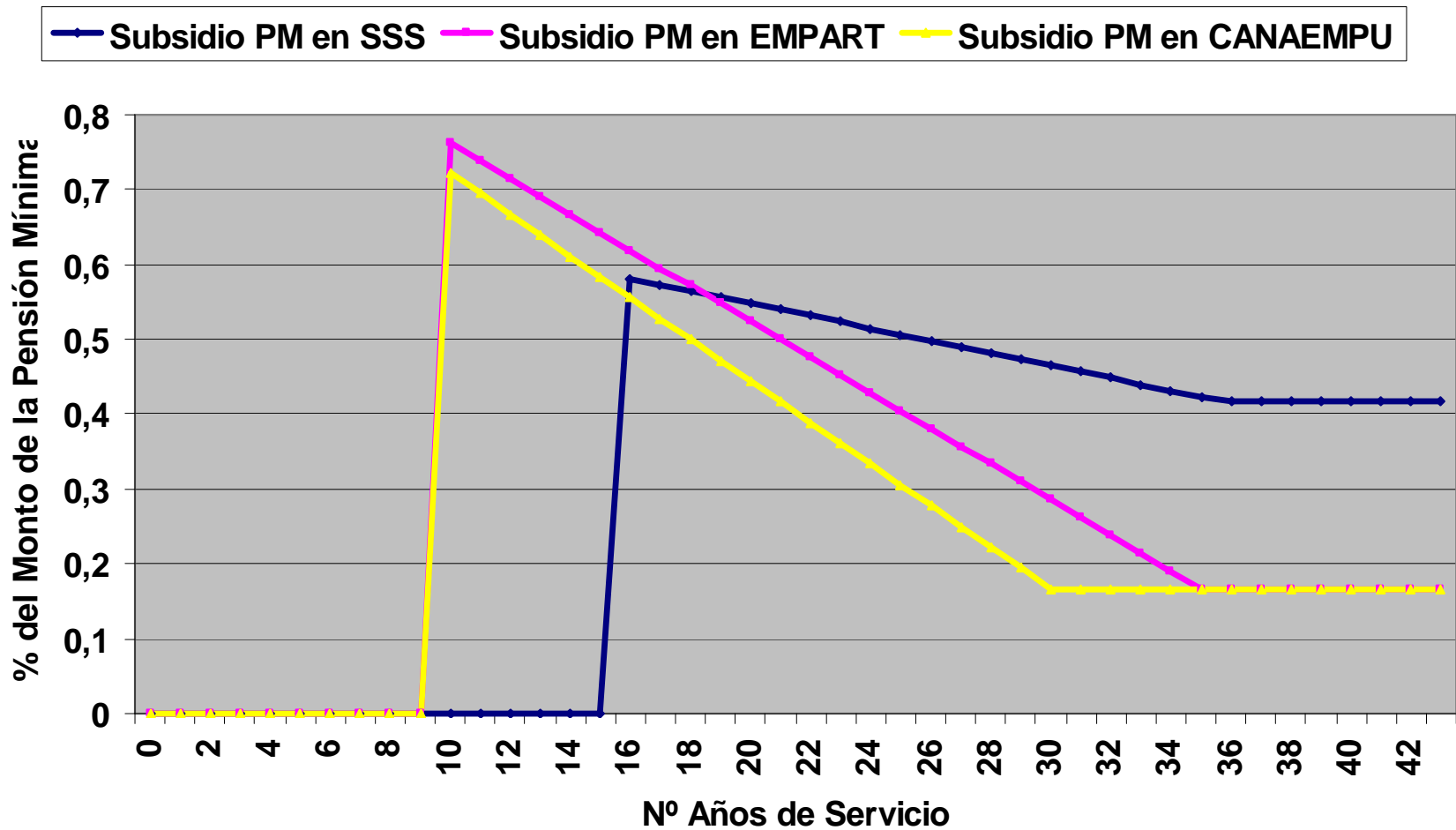
Note: The MP subsidy in the old system started in 1952

Tasas de Reemplazo Sistema Antiguo



Note: The MP subsidy in the old system

Subsidios de Pensión Mínima en Sistema Antiguo
(caso donde MPM = 120% del promedio ultimos salarios)



Coverage of Benefits in Chile in 2004

B. Contributory Pillar: cover ben = 40%

B.1 Formula Pensions at old system above MP:

- 26% of age group. (about 420.000)

B.2 Capredena, Dipreca, Mutuales: additional 3%.

In contrast to the other pensions, this is a deferred compensation. Minimum service required is 20 years. After a quit, the person works for other employers and contributes for a 2nd pension. No data about double pensions. N° of Capredena + Dipreca pensions = 158.479. The % with a single pension from this source is estimated at 1/3.

B.3 New system (AFP) pensions above PASIS: 11%

This includes “Transitory Dividends” equal to MP. Many in this last group would finance a lifetime pension above PASIS but below MP (which is a “family” level). Instead, the new system rules gives them a “transitory

dividend” equal to the MP. (N° of beneficiaries estimated as 100% N° Vejez + 50% N° Disability – 65.000 who get MP subsidy = 172.000)

Coverage of Benefits in Chile in 2004

C. Voluntary Pensions: cov. ben = 15%

N° of women aged 60 or more + N° of men aged 65 or more:	1.433.370	100%
Declares receiving a pension:	824.667	57.5%
Dis not receive a pension but his/her personal monetary income was above the minimum pension:	279.551	19.5%

Source: CASEN 2000. "Ingreso Monetary Income" is the sum of rents from property, rent from financial sources, transfers different from pensions and earnings from work. Discrepancies with other sources: Population differs from CELADE 2005 by 160.000.

Coverage of Benefits in Chile in 2004

D. Intrafamily Pensions: 10%

N° of women aged 60 or more + N° of men aged 65 or more:	1.433.370	100%
Did not receive a pension, and personal monetary income was below the MP, but declares that the household's monetary income, divided by the number of members, is above the MP.	182.846	12,8%

Source: CASEN 2000 and Mimeo Valdés (2003).

95% of this group are women (living with spouses or with children).

Coverage of Benefits in Chile in 2004

Summary of coverage of benefits Chile 2004

Recommendation: Endow SUSESO with a budget to cross data bases from INP, AFP, SII, CASEN, in order to create reliable statistics on coverage of benefits.

	Reported	Adjusted to 100%
Pensions and Complements from the Solidary Pillar:	38%	34%
Contributory pensions:	40%	36%
Voluntary pensions:	15%	13%
Intrafamily pensions:	10%	9%
Below poverty line (CASEN 2003)	9,2%	8%

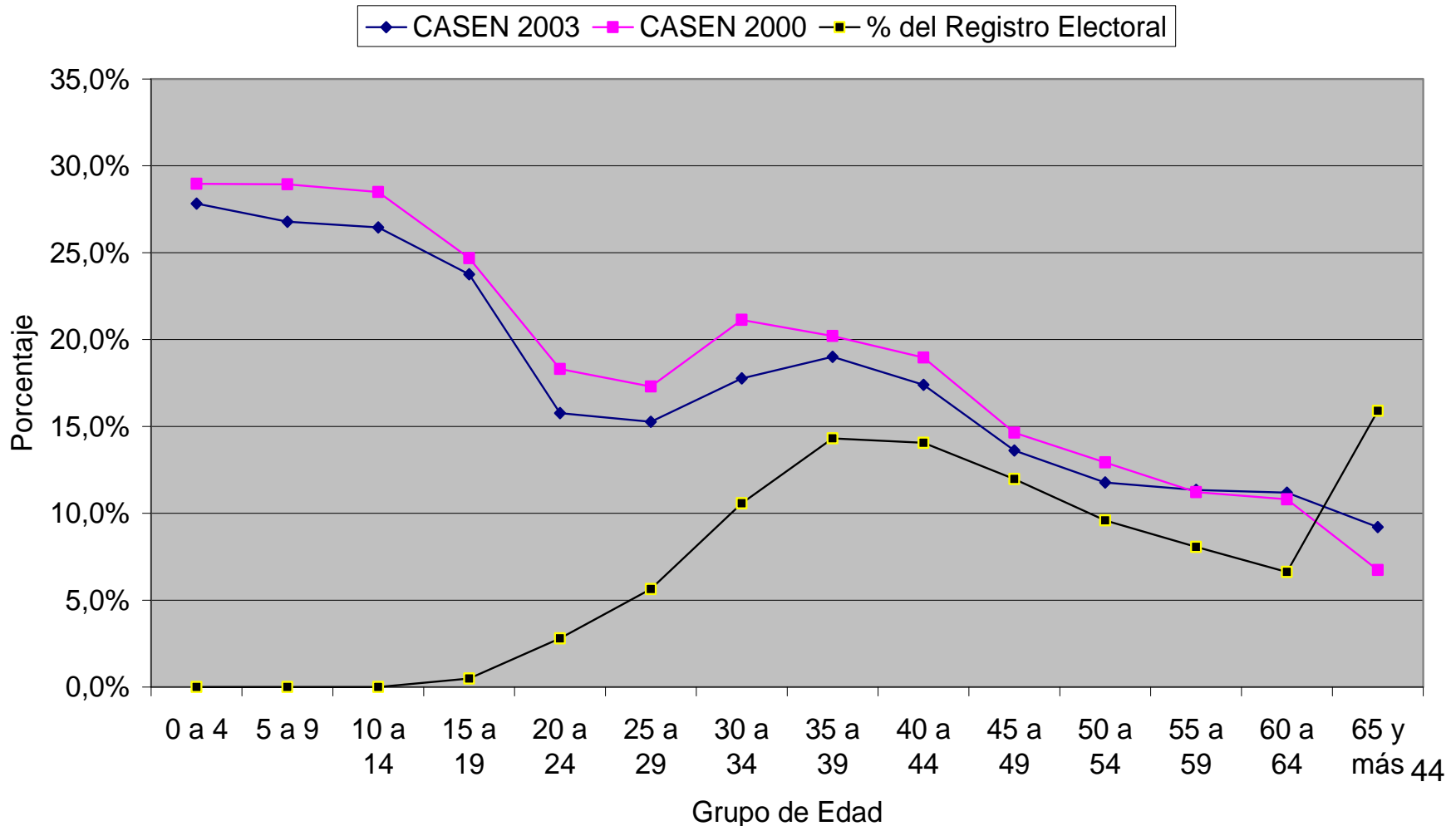
In 2004, 64% did not have a contributory pension above the MP.

**¿Is the system “in a crisis” as President Bachelet has been led to believe?
Depends on the **relative** poverty rate of this age group, as compared to other age groups.**

Coverage of Benefits in Chile in 2004

¿Did the old suffer a higher poverty rate than other age groups in 2004? **NO**

Tasa de Pobreza por Edad y Participación en Registro Electoral: Chile



Coverage projections for 2025

Berstein, Larraín, Pino (2005): “only 45% of participants will self-finance a pension above the MP in 2025”.

- As % of popul.? if 10% pop doesn't participate =>41%
- Adjust for missing old system pensions in 2025 =>45%

Big advance over 2004 level, which was 36%.

BLP: “Minimum Pension subsidies in AFP, which helped 3% of age group in 2004, will help only 5-10% in 2025.”

- ¿Is this little? Must add the Minimum Pension Subsidies in the Old System in 2025, N^o Voluntary pensions and N^o of Intrafamily pensions in 2025.

Coverage of Benefits in 2025 will be better than in 2004

- Bias in BLP projection: Income equation excludes general productivity increases (TFP, K/L) => Age-earnings profile biased to be almost flat. This underestimates % that gets MP subsidy and overestimates % that self-finance a pension above MP.

Coverage projections for 2025

Will contributory system alleviate improvidence? How large will the replacement rates be in 2025?

The replacement rate obtained by a median income worker that is self-employed and is improvident: $PASIS / Ch\$200.000 = 25\%$. Too low.

Projection of replacement rates? They seem to improve, but slowly

- In 2004, 34% received subsidies from Solidary Pillar, but the poverty rate of active workers when that cohort was active was below that, maybe 25%. => possible gap in replacement rates
- By 2025, coverage of contributory pensions will increase 10 percentage points, but this will still leave many people with low replacement rates.

Is this a failure of the contributive system? No, it is a failure of the labor market: many self-employed are informal (cannot be forced to contribute) and are poor (should not be forced to contribute, as argued below).

Are there reforms to improve replacement rates?

Measure 1: IRS forces honorarium income to contribute for old age. Covers formal self-employed.

Reforms to raise replacement rates

Measure 2: Incentivate self-employed poor to join covered employment by cutting contribution rate for them (see below)

Measure 3: grant partial liquidity. Many contributors suffer high cost due to the illiquidity of saving in the contributory pillar.

Illiquidity reduces welfare even of provident workers with small precautionary saving and high cost of consumer credit. It is perceived as even more damaging by the improvident.

Iliq.=> too many workers choose to be self-employed => low training, low productivity gr.

Replacem. rates will improve if illiquidity is attenuated.

Reforms to raise replacement rates

Proposal: allow limited credit from individual account balance. Any use allowed. Only in the AFP system where the benefits of others are not affected.

- No new credit until the previous one is returned.
- Amount: 70% of contributions during last 3 years.
“Airline mileage” effect: keep flying (keep contributing) if you wish to keep liquidity.
- Interest rate equal to observed in consumer credit. AFP should hire out collection to separate company.
- **If recovery incomplete by pension age, the first benefits are sequestered to pay debt. Delays effective pension age by a few months in proportion to delinquency.**
- Leave limit to credit in the law => changes would require special majority in Congress and approval by Executive, who must initiate all social security legisl.
- The Philippines has done this successfully since 1952.

The most benefited: the young & the poor in covered jobs

Proposals to reform the Solidary Pillar

Reason A to reform Solidary Programs: Maybe coverage of benefits above poverty line will fall in 2025 as compared to 2004, because:

1. The effective requirement for the MP subsidy is smaller in the old system than in the new one:
 - 10 years for women, in all the old plans (Cajas).
 - 10 years for men in 2nd and 3rd largest Cajas.
 - 15,8 years for M in SSS, the largest Caja.
2. An advantage of the new system is that it offers a new benefit: “Transitory Dividends” for those that do not self-finance a MP but has a positive account balance. When the account balance is drained to zero, the individual’s pension falls to the assistance pension if poor.

Design mistake: benefits falls once the individual ages enough, instead of rising with age => small help with old age poverty.

Proposals to reform the Solidary Pillar

Reason B to reform Solidary Programs: too many MP subsidies reach those above the median income. This is because those subsidies are not means-tested. They are tested only by income coming from contributory pensions, ignoring voluntary saving and intrafamily.

Fact: The N^o of women in the richest quintile by Family Income per Capita that received MP subsidies was 3.7 times larger than the N^o of similar women in the lowest quintile. (Valdés 2002, p. 60, using CASEN 1996)

⇒ **The “rights” approach has not been well applied in MP Subsidies, since introduction in 1952 until today.**

Reason C: Many serious incentive problems in current rules for MP Subsidy and for Assistance Pension.

Proposals to reform the Solidary Pillar

Is a *Scaled Minimum Pension* a solution? NO

Definition: Minimum Pension Amount = Max (0 ; Min { (N^o months of contribution/240)*Ch.\$90.000 ; Ch.\$90.000})

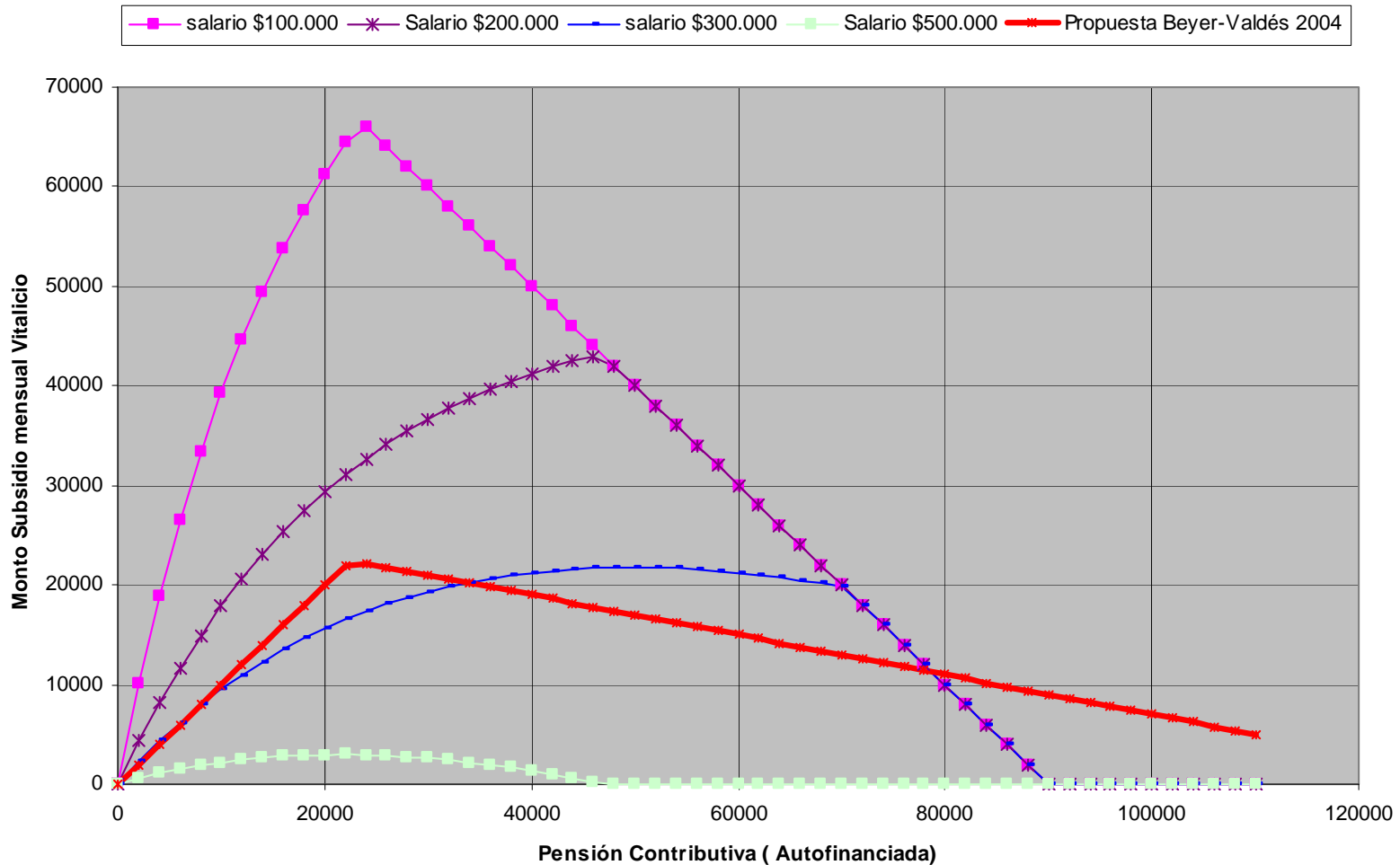
- **Case A: Fruit picker** : intense effort during harvest. Works three months per year, for \$200.000 per month. Works between ages 20 and 39. Delays consumption for 40 years on average.
- **Case B**: Secretary works 1/2 day, for \$132.665/mo., 12 months a year, between ages 40 and 59. Delays consumption for 20 years.

At age 60, both have same balance in individual account (if $r = 5\%$ real): Ch. **\$5,4 million**. Both attain same contributory lifetime pension: Ch. \$31.105/month. => **equivalent effort made in different ways. Same poverty in old age.**

- Horizontal equity requires same subsidy. But:
Subsidy for A: zero; Subsidy for B: Ch.\$58.895/mo.
=> Counting N^o of months will never attain horizontal equity.

Proposals to reform the Solidary Pillar

Subsidios Implícitos en la Pensión Mínima Escalonada



Is a Scaled Minium Pension efficient?

Size of the subsidy is unpredictable. Marginal subsidy on a \$1 contribution ranges from +350% to -100%.

Proposals to reform the Solidary Pillar

Efficiency problems obtained from previous figure:

1. When individual can be sure he will reach 240 months, each additional \$1 contributed raises pension by ZERO => **Implicit tax rate on further contributions is 100% Too High!! Promotes informality.**
2. When few contributions are expected, and if salary is low, the marginal subsidy for contributions is about **350%** => **too high !! Unnecessary, because labor response will be too small. Such high rates promote fraud.**
3. In the range where the subsidy is rising to incentivate contribution, it must be **regressive**, because it gives more to those that have a higher self financed pension.
4. Complexity: marginal tax rates changes from +350% to zero to -100% depending on N and earnings level. => **low effectiveness in incentivating contributions.**

Proposals to reform the Solidary Pillar

Probably for these reasons, no OECD country has Scaled MP.

My Proposal: “**Graduated Subsidy**”, as OECD
It would substitute current Assistance Pension and current MP subsidies.

Definition of the Graduated Subsidy: for each OLD PERSON:

Subsidy (\$/mo.) = Basic Amount – (withdrawal coefficient) x
(Index of Pension Income). (if negative does not apply) Only for residents.

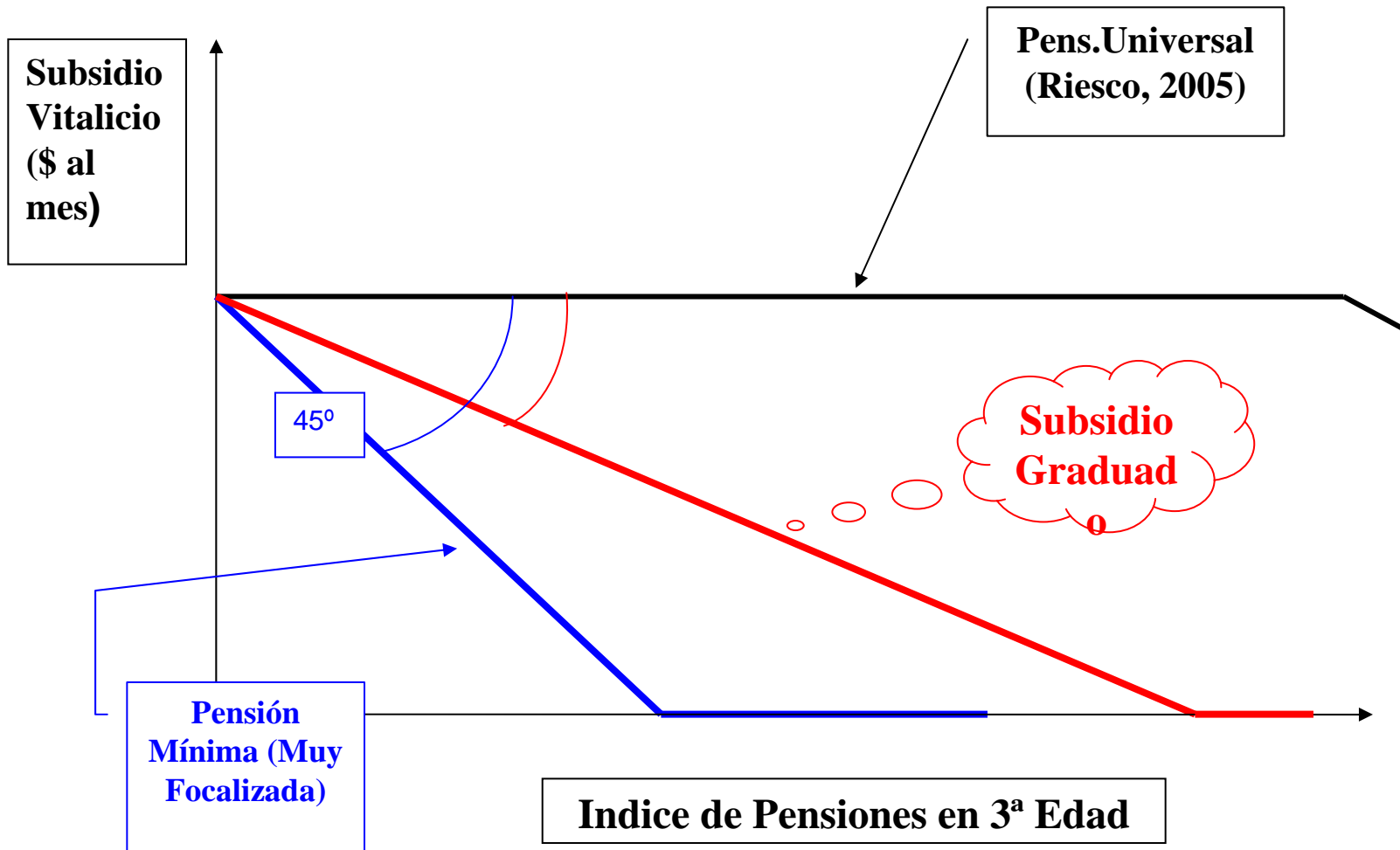
Proposed Basic Amount = Current Assistance Pension (\$50.000). The government would adjust level over time according to budget, as done with MP since 1952.

If Withdrawal Coefficient = **Zero** => a Universal Flat Pension.

If it is **One** => Highly targeted subsidy, such as current MP subsidy If coeff. Takes intermediate values, such as 0.2 or 0.3, a “graduated subsidy” obtains.

Proposals to reform the Solidary Pillar

Types of Graduated Subsidy: the reduction for those that do not complete 40 years of residence in Chile is to (N° years Resid./40):



Proposals to reform the Solidary Pillar

How do we choose withdrawal coefficient?

Literature on optimal taxation reconciles 3 aims:

- Effectiveness in delivery of support to the poor.
 - Minimize labor and saving distortions for the poor.
Externality: if they avoid formal jobs, loose option for training and learning by doing. Productivity stagnates.
 - Minimize tax distortions for the rest of population.
-
- Simulations by Valdés-Poblete (2005) find that optimum is near 0.20.
 - In this case, subsidy falls off to zero when Pension Income is \$250.000/mo.

Proposals to reform the Solidary Pillar

Index of Pension Income = A + B + C.

A = Contributory Pensions (INP + AFP) + employer pen.

B = Voluntary Pensions, estimated by IRS from sum of non-earned income: rents imputed to property and investments.

C = Intrafamily Pensions, estimated by CAS points (targeting system run by the municipalities) that would obtain if individual had zero earnings. Example: Impute pension income of Ch.\$ 300/mo. for each CAS point above 400.

Novelties: **(a) every beneficiary would have to request a CAS rating.** This saving allows an increase in Basic Amount; **(b) No taxes on labor earnings when old.** Income tax distortion remains; **(c) Only INDIVIDUAL benefits.**

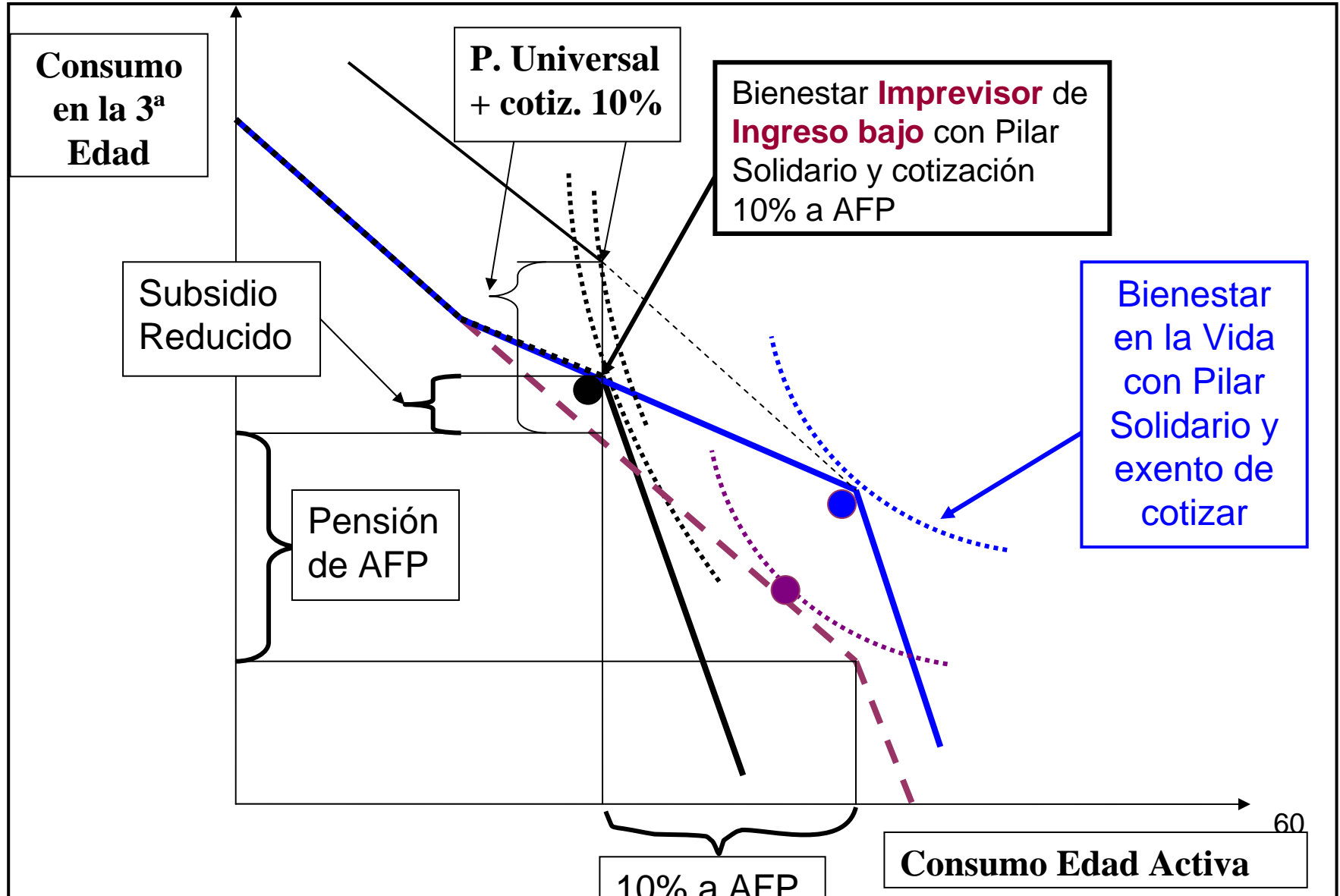
Reform Contributory System due to Solidarity

If the poor that take covered jobs are forced to contribute, they reduce standard of living in the active phase of life, for 2 reasons:

- A) assuming the Solidary Pillar has some gradual withdrawal of benefits, the poor contributor raises contributory pensions, and this cuts his subsidy from Solidary Pillar. The provident poor loose out.
 - => programs that offer the poor fiscal incentives to save for old age (“APV de los pobres”) may leave them worse off, unless all repercussions are anticipated.
 - B) If the poor worker is also improvident, then he has a second reason to reject covered jobs and move to self-employment.
 - Who gains from mandatory contributions to the poor in covered jobs? Future taxpayers (capital owners and middle and high earners) **Regressive.**
- I propose priority for support to the poor, over improvidence alleviation.** => The contributory system should be adjusted for **the poor** that take covered jobs.

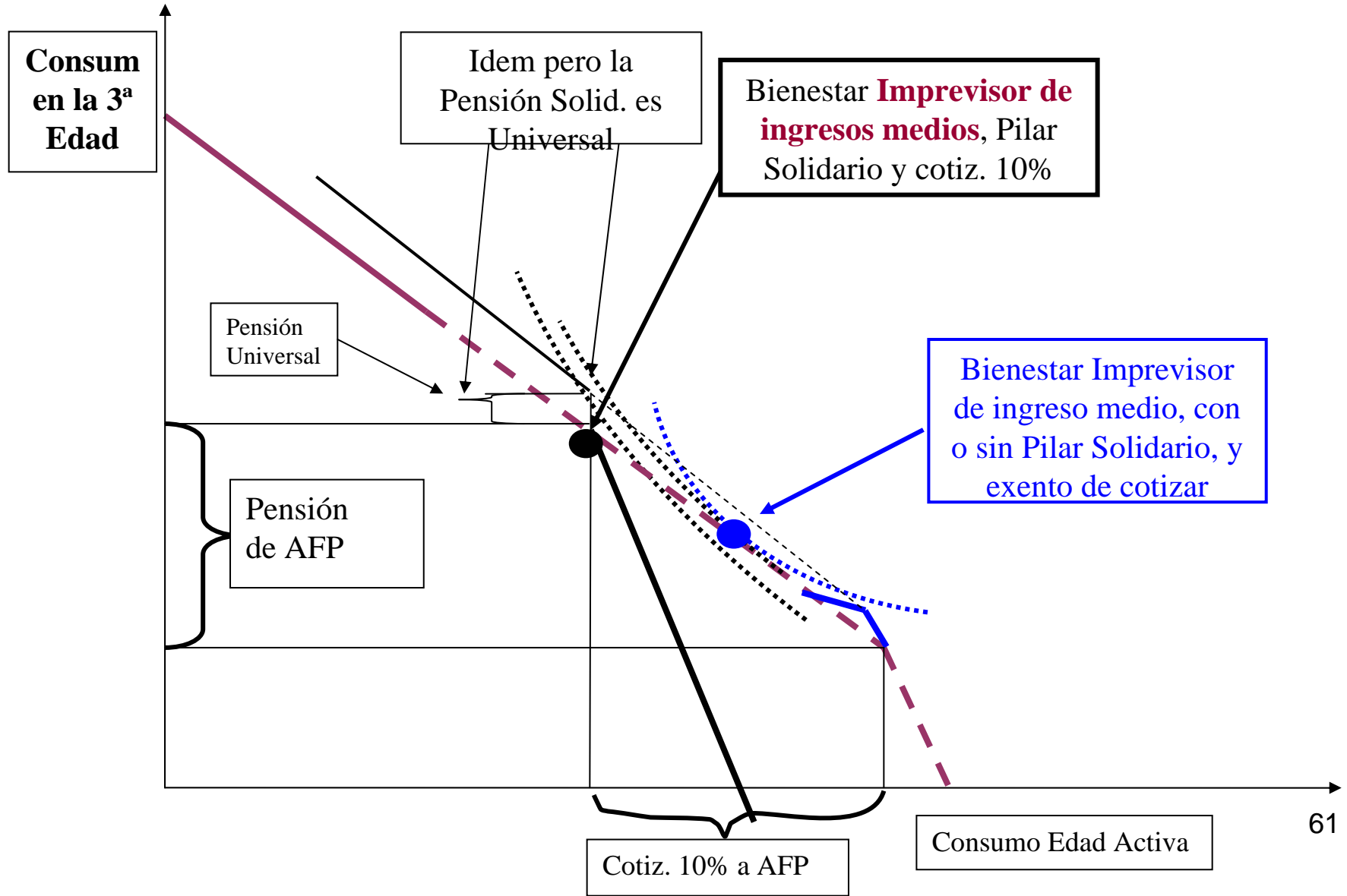
Reform Contributory System due to Solidarity

Case of poor in covered job, but this one is improvident



Reform Contributory System due to Solidarity

Case of median earnings, improvident: Not affected by Solidary Pillar



Reform Contributory System due to Solidarity

Is it a good solution to exempt the self-employed? (As Chile 1924-2006)? No: the poor are driven away from covered jobs. Middle income self-employed and improvident people get a replacement rate that is too low.

Better: cut the contribution rate for the poor that take covered jobs.
(Beveridge, 1942 => Netherlands, Canada, Australia, Brazil). **My proposal:**

**New Contribution Rate = 10% - (reduction factor)x(600 – CAS points)
= 2% if formula above yields a smaller number.**

Reduction factor: 0.08. Municipality measures CAS every 2 years. The IRS would inform employers as the CAS point change.

Part of the 2% allows purchase of Disability and Survivorship Insurance, which would NOT be reduced.

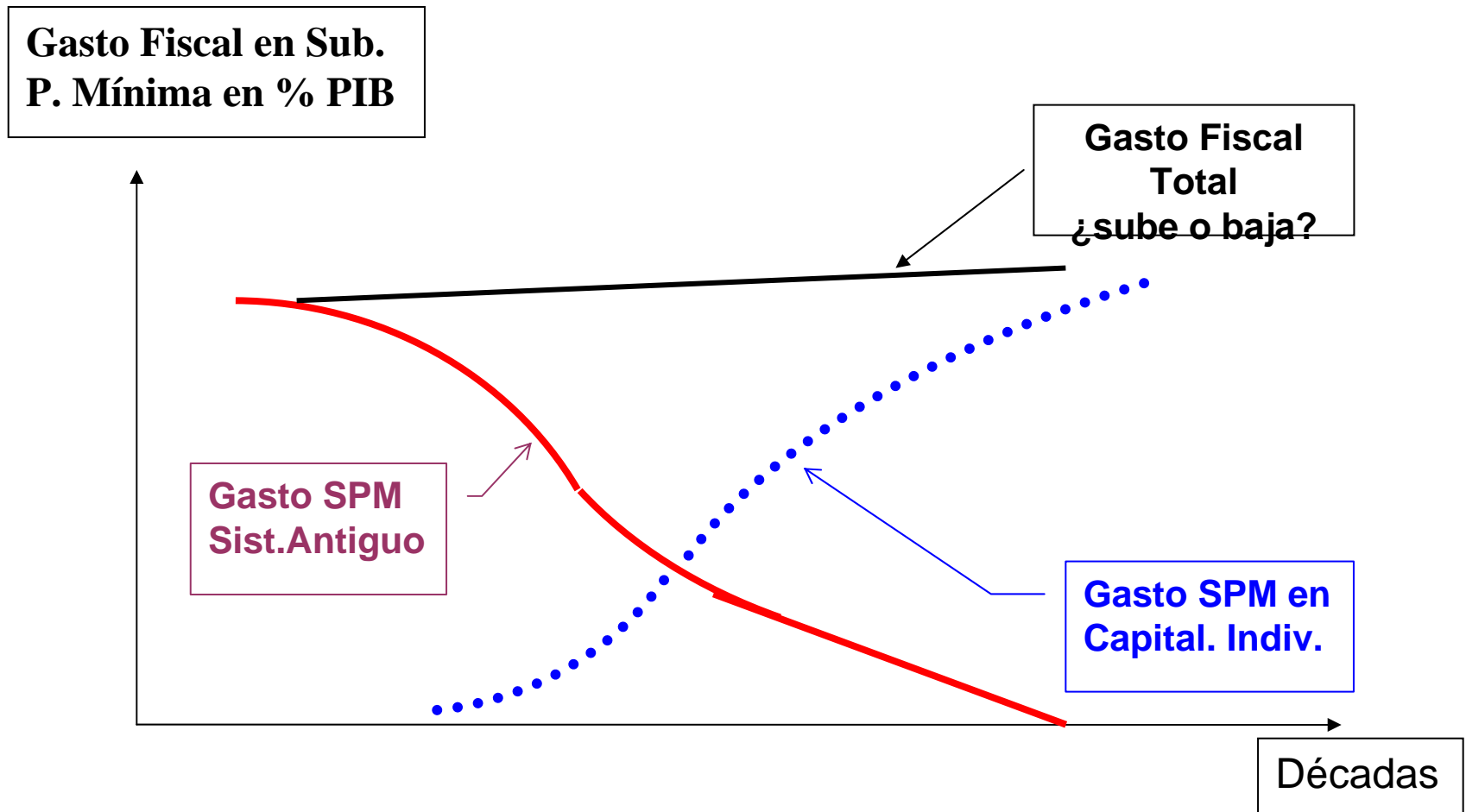
Proposal: apply this same reduction to the contribution for health insurance (effectively an earnings tax)

Outcome: Big change for the poor: getting a covered job would become attractive. Training, learning, productivity.

- **The young would be highly benefited.**
- **If poverty varies over the business cycle, it helps insulate the poor.**

Trends in Fiscal Cost of Solidary Pillar

Is rising expenditure in MP Subsidy for NEW system worrying, as advertised? No, the MP subsidy in the OLD system is **falling!!** Due to transition in 1980 pension reform, one expenditure is replacing the other. Trend in **total** expenditure is what matters



Trends in Fiscal Cost of Solidary Pillar

As the government fails to report Fiscal Cost of MP Subsidy in the Old System, I made a special study: In 2004, 0.16% of GDP (Valdés, 2006).

Twice the expenditure in MP Subsidies in the NEW system in 2004. Note different way in which subsidy is disbursed: top up in old system and annuities, vs. wait until funds run down in PW.

- Consistent with coverages of 20% and 3%.
- This is 8% of the “operational deficit” of OLD system. Size of OD was 2.70% of GDP in 2004.

Projection of MP Subsidy expenditure for 2020-30:

- IMF projects the OD will still be 0.80% of GDP. What share of this will be MP Subsidy? Two scenarios: same 8%, or doubles to 16%.

Trends in Fiscal Cost of Solidary Pillar

IMF (2005): + Estimation by Valdés (2006) => **fiscal pressure from Solidary Pillar is rising, but still very small in absolute value.**

Fiscal cost of health subsidies for the old might be much larger.

(all figures in % of GDP that year)	2004	Years 2020-2030 (without 2006 reform)	
MP Subsidy for participants in NEW System	0.08%	0.3%	
		Low Scen.	High Scen.
MP Subsidy for participants on OLD System	0.16%	0.05%	0.10%
Total Expenditure in MP Subsidies	0.24%	0.35%	0.40%
Assistance Pensions	0.4	0.6%	
Total Solidary Pensions	0.64%	0.95%	1.00%