

# **Social Welfare and Employment: The Case of Mexico**

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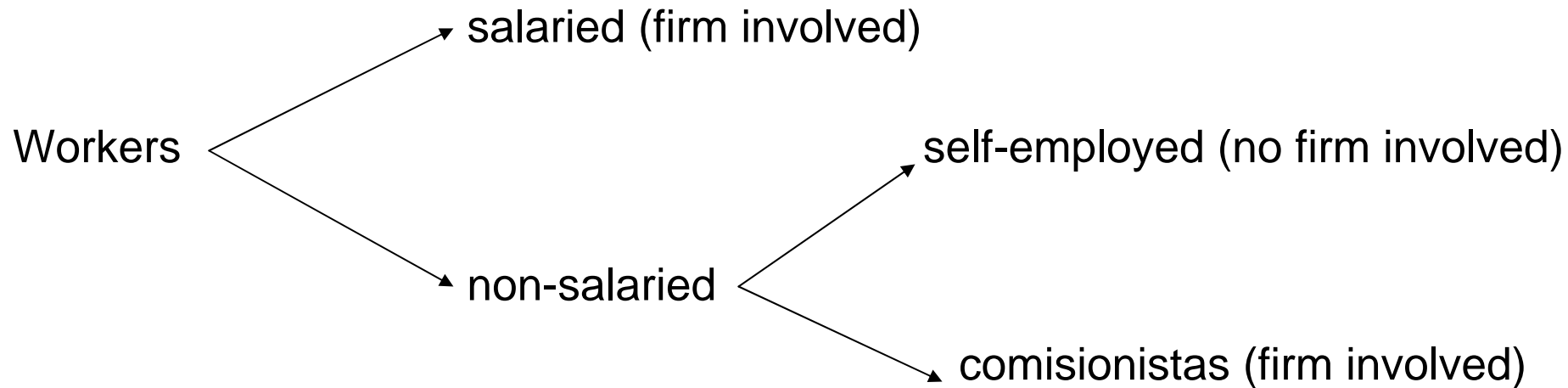
# A critical question:

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How can the requirements of an efficient and flexible labor market --indispensable to successfully compete in the world economy--, be made compatible with effective social programs to protect workers from various risks and redistribute income to those in need?

# **Institutions, Workers and Social Programs**

# Mexico's laws distinguish between salaried and nonsalaried workers

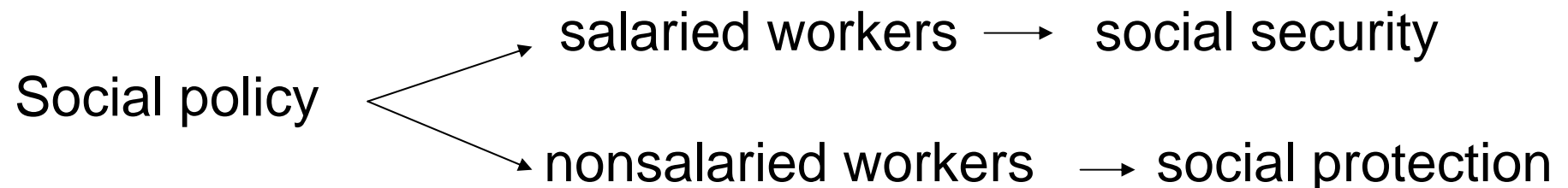


**Salaried workers** are subordinated to a boss and are paid a wage;

**Non-salaried workers** are self-employed, or have a relationship with a firm that is not subordinated and without an explicit wage (contracts to elicit effort or share risk, with commissions, profit-sharing or other pay structures).

# This distinction affects social programs

- The main programs to raise workers' welfare are **social security and labor regulations on firing and severance pay**, which in Mexico are a right of salaried workers only;
- This puts the government in a **dilemma**: leaving millions of nonsalaried workers without social benefits, or creating special programs for them. The Mexican government has opted for the second option via a parallel system of social benefits, which I label here **social protection**;
- As a result, Mexico has a **dual system** for protecting its workers:



# Social protection and social security are different

Social security	Social protection
<ul style="list-style-type: none"><li data-bbox="62 389 896 429">• Obligatory and bundled.</li><li data-bbox="62 511 896 704">• Health, life, work-risk, disability and retirement pensions, day care centers, housing loans, sports and cultural facilities, and severance payments.</li><li data-bbox="62 785 896 878">• Paid (mostly) with workers and firms wage-based contributions.</li></ul>	<ul style="list-style-type: none"><li data-bbox="959 389 1557 429">• Voluntary and unbundled.</li><li data-bbox="959 511 1568 611">• Health, housing, day care, retirement pensions.</li><li data-bbox="959 692 1606 732">• Paid from general revenues.</li></ul>

- The expression “social protection programs” is reserved for programs that deliver benefits to workers of any income level **conditional on not having social security**.
- Regulations on severance pay are classified as part of social security (in Mexico there is no unemployment insurance).

# **Formality and Informality**

# Labor status and governance structures

- All labor relationships are regulated by the Federal Labor Law;
- However, for **salaried labor** the laws that apply to firms matter because only firms hiring this type of workers are obliged to provide them with social security and severance pay;
- This difference is key, because the costs of social security and severance pay must be internalized by firms and workers in salaried contractual relationships. **These costs are absent in non-salaried labor relationships.**

# For social policy, the relevant definition of formality refers to workers' access to social benefits.

**Formal workers** → salaried and registered with IMSS (**legal**)

**Informal workers** → (i) salaried and non-registered (**illegal**)  
(ii) comisionistas and self-employed (**legal**)

**Formal firms** → hiring salaried workers and registered with IMSS (**legal**)

**Informal firms** → (i) hiring non-salaried workers, i.e., comisionistas; (**legal**)  
(ii) hiring salaried workers but not registered with IMSS (**illegal**)

Note that because there are illegal workers there is **no one-to-one** mapping between salaried workers and formal workers, and non-salaried workers and informal workers.

# Composition of Mexico's labor force, 2006

	Number (millions)	Share
<b>I. Formal</b>	17.0	38.3
public	2.9	6.7
private	14.1	30.7
<b>II. Informal</b>	25.8	58.1
salaried	8.1	18.3
nonsalaried	17.7	39.8
<b>III. Unemployed</b>	1.6	3.6
<b>TOTAL</b>	44.4	100.0

# Note that:

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- informal employment is 58% of the labor force;
- at least 8.1 million salaried workers are illegal (vs. 14.1 million legal); **evasion of social security is massive;**
- The open unemployment rate is less than 4%. **The problem in Mexico is not “lack of jobs”, but “lack of good jobs”;**

# Composition of Mexican firms, 2003

Size		INEGI		IMSS		Difference	
		(1)		(2)		(1) - (2)	
(number of workers)	from to	number of firms	workers	number of firms	workers	number of firms	workers
3	5	581,262	2,078,023	183,432	686,515	397,830	1,391,508
6	10	153,891	1,135,021	95,886	725,253	58,005	409,768
11	15	47,601	604,387	38,855	494,430	8,746	109,957
16	20	24,361	433,741	21,342	379,795	3,019	53,946
21	30	25,171	627,011	22,399	556,830	2,772	70,181
31	50	20,927	812,729	19,125	743,225	1,802	69,504
51	100	16,100	1,135,608	15,337	1,077,909	763	57,699
101	250	10,898	1,683,740	10,526	1,629,298	372	54,442
251	500	4,029	1,379,532	3,804	1,314,357	225	65,175
501	more	2,636	3,199,628	2,626	3,082,169	10	117,459
<b>Total</b>		<b>3,005,014</b>	<b>16,101,322</b>	<b>763,791</b>	<b>11,178,508</b>	<b>2,241,223</b>	<b>4,922,814</b>

Arguably **75% of all firms in Mexico are illegal**; this excludes economic activity in the streets and in rural areas. Considering firms with 6 or more workers, this share drops to 25%.

# Note that:

- 70% of all firms have up to **two** workers;
- 90% have up to **five** workers;
- Only 1.1% (or 33,663 firms) have **fifty workers or more.**

This implies that:

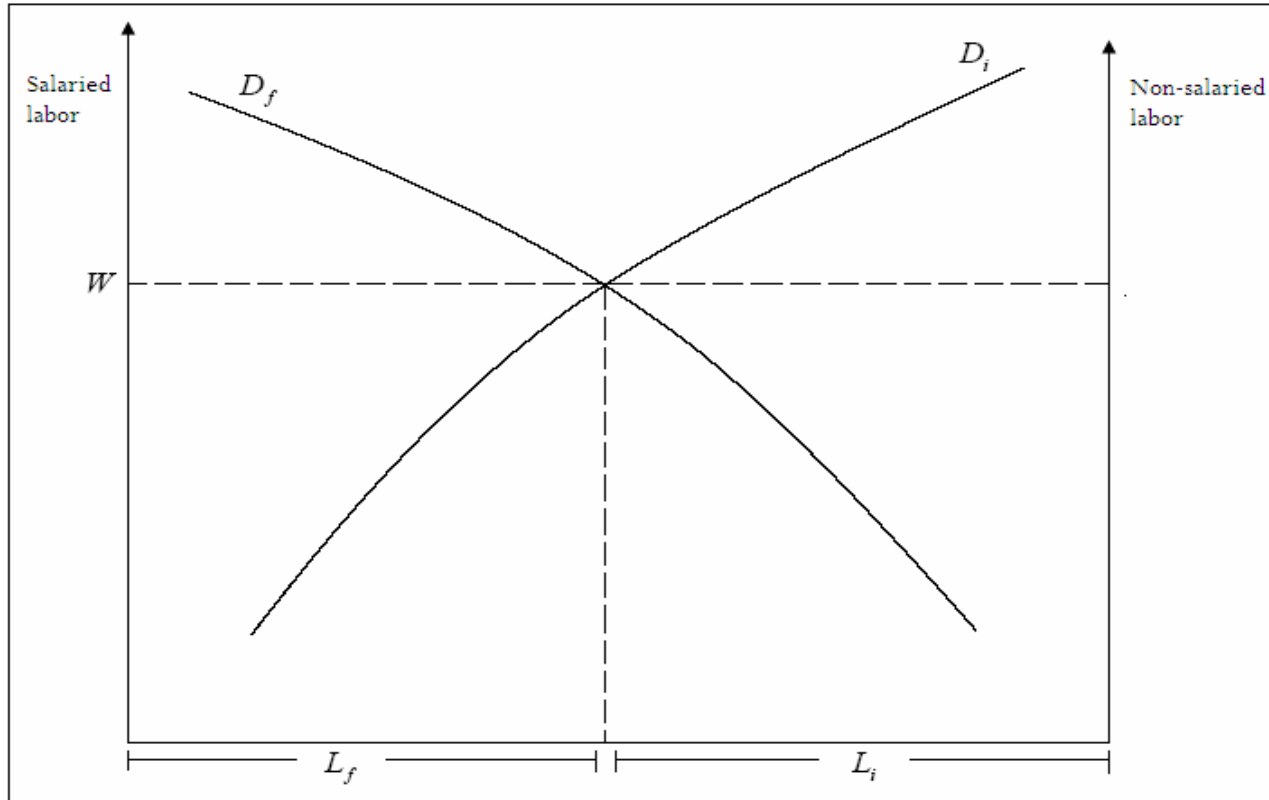
Only **11 out of 40 million workers labor in a firm of five employees or more.** Large self-employment and employment in micro and small firms at present translates into precarious conditions for the majority of workers in Mexico.

# Implications of the formal-informal dichotomy:

Social	Economic
<ul style="list-style-type: none"><li>• Workers of similar abilities get different social benefits.</li><li>• Protection from risks are different.</li><li>• Contracting problems in insurance markets only solved for some.</li><li>• The composition of consumption only changed for some.</li></ul>	<ul style="list-style-type: none"><li>• Workers of similar abilities have different productivity.</li><li>• Firms face different labor costs.</li><li>• Social security and social protection have different fiscal implications.</li><li>• Rates of return on investments modified.</li><li>• Potential impact on savings.</li></ul>

# **Social Programs, Welfare and Productivity**

# The labor market without social programs



In the absence of social security and severance pay regulations, the distinction between salaried and non-salaried employment has no welfare or efficiency implications.

# Social security:

1.] Benefits are **bundled**. Its costs are:

$T_f =$  [health insurance  $\oplus$  retirement pensions  $\oplus$  disability pensions  $\oplus$  life insurance  $\oplus$  work-risk pensions  $\oplus$  day care centers  $\oplus$  housing loans  $\oplus$  severance pay]

2.] Workers are forced to purchase all benefits **simultaneously** and have to value all benefits **jointly**.

3.] Workers valuations depend on preferences, access and quality of services, and so on. Let  $\beta_f \in [0,1]$  denote the value to the worker of social security benefits. The **utility** of a salaried job is: 
$$U_f = w_f + \beta_f T_f$$

# Social protection:

1.] Benefits are **unbundled**. Its costs are:

$T_i$  = [health insurance + retirement pensions + housing loans + day care centers + ...].

2.] Benefits are **voluntary** and can be consumed **separately**; they are paid from general revenues.

3.] Workers may also value benefits at less than their costs, so that  $\beta_i \in [0,1]$ . Hence, the utility of a non-salaried job is:

$$U_i = w_i + \beta_i T_i$$

# Wages, social benefits and worker's utility

$T_f$  = costs per worker of social security and severance pay,

$\beta_f T_f$  = value to the worker of social security and severance pay,

$T_i$  = costs per worker of social protection programs,

$\beta_i T_i$  = value to worker of social protection programs,

$U_f$  = wages + value of social security benefits =  $(w_f + \beta_f T_f)$

$U_i$  = wages + value of social protection benefits =  $(w_i + \beta_i T_i)$

# Labor market implications of social programs

## Total Costs and Benefits of Salaried and Non-Salaried Labor

	Salaried labor	Non-salaried labor
Costs to firms	$w_f + T_f$	$w_i$
Benefits to workers	$w_f + \beta_f T_f$	$w_i + \beta_i T_i$

There are **two** wedges:

- between the costs of salaried labor to firms and the benefits to salaried workers;
- between the costs of labor to firms having relationships with non-salaried workers (including the one-man firm of the self-employed) and the benefits to workers.

When  $\beta_f < 1$  and  $T_i > 0$  both wedges operate in the same direction: **taxing salaried employment and subsidizing non-salaried employment.**

# In Mexico these distortions are large

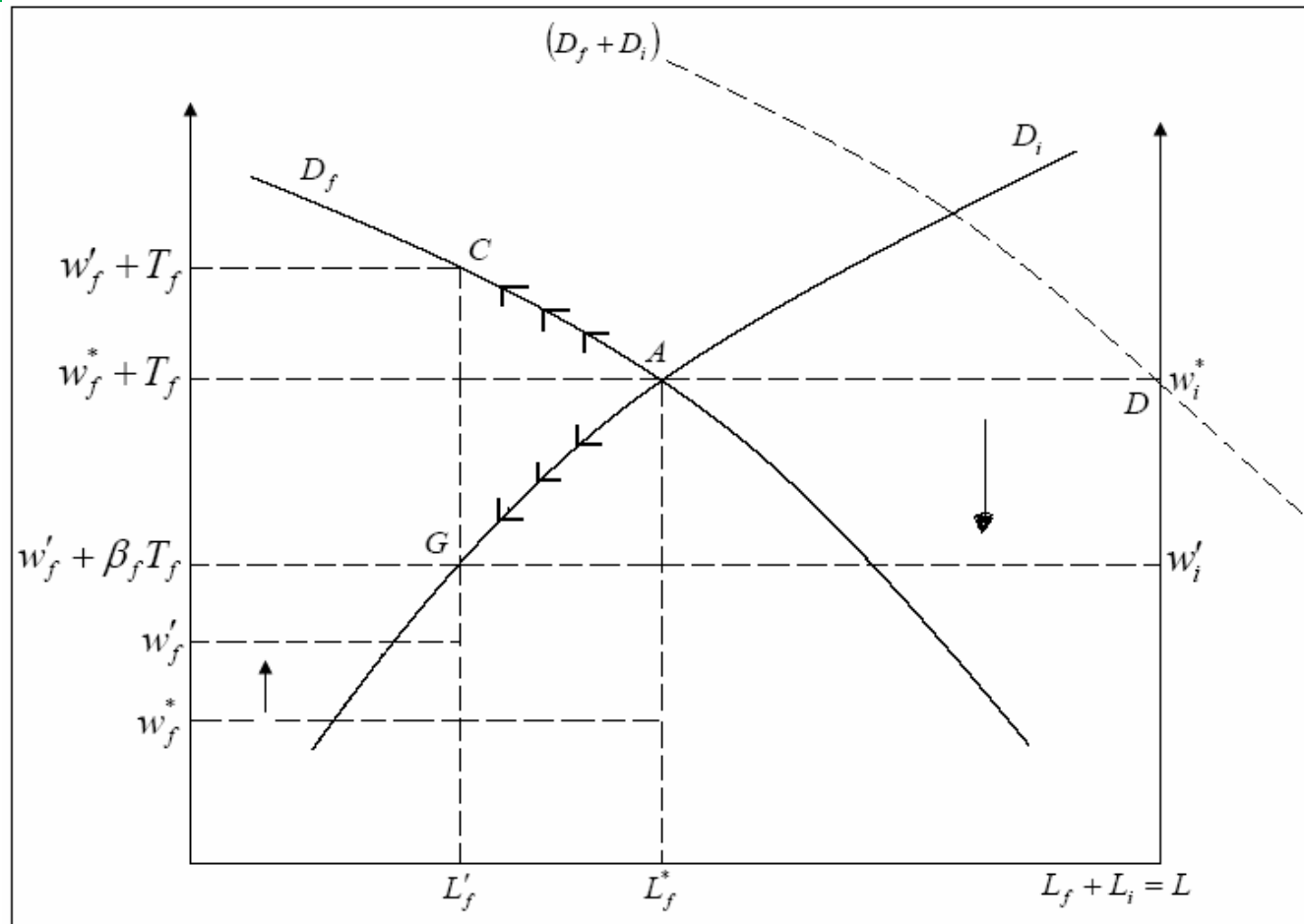
- In 2006  $T_f = 5.6$  pesos an hour and  $T_i = 1.3$  pesos an hour
- For low wage workers econometric evidence shows  $\beta_f T_f \approx \beta_i T_i$
- This implies that  $\beta_f / \beta_i = 0.23$
- If  $\beta_i = 1 \rightarrow \beta_f = 0.23$  ; if  $\beta_i = 0.75 \rightarrow \beta_f = 0.30$
- The tax on unskilled salaried labor is in the order of 26% of  $w_f$ ; on the other hand,  $T_i$  is about 8% of  $w_i$ .

This implies a difference of almost 35% in the relative cost of unskilled formal to informal labor.

# Key problem:

- A system of social benefits that segments workers based on labor status has the very unfortunate implication of strongly distorting the labor market;
- These distortions end up hurting all workers, partly defeating the purpose of the system of social benefits;
- In Mexico these distortions appear in the form of a very large “informal sector” where workers have erratic and incomplete access to social benefits;
- But these distortions also lower the real wages of all workers (because it lowers labor productivity) and the rate of growth of GDP.

# The labor market with social security but no social protection programs and fully legal behavior

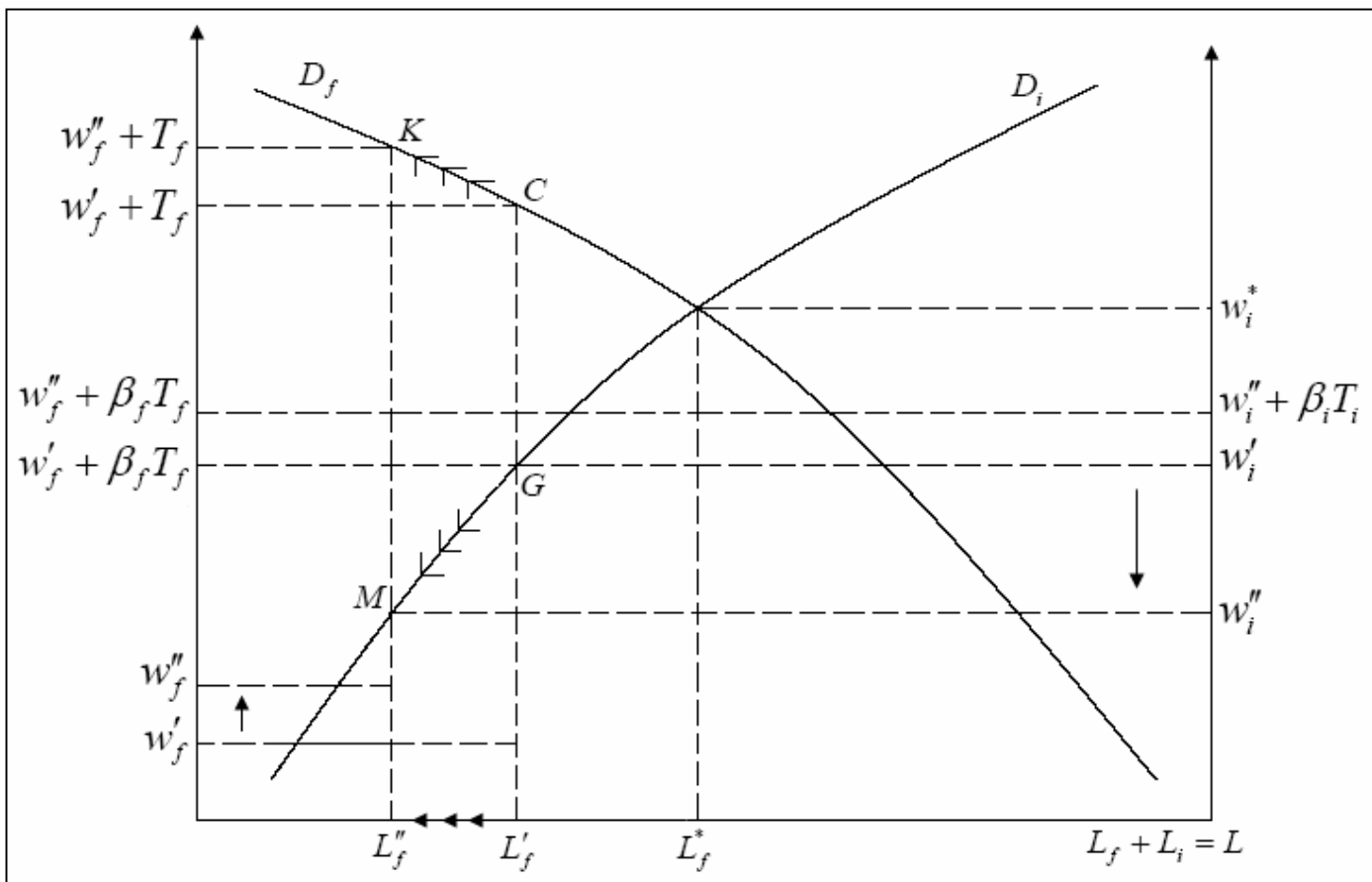


Unless  $\beta_f = 1$  social security acts like a tax on salaried labor. The government's social goals are accomplished with  $L_f'$  workers and **not at all** with  $(L - L_f')$  workers. The evidence shows that in Mexico  $\beta_f < 1$ .

# Note that:

- When  $\beta_f = 1$  social security **does not** redistribute income from firms' to workers; it just changes the composition of workers consumption.
- When  $\beta_f < 1$  social security lowers the utility of all workers: salaried and non-salaried.
- Formal firms' profits (or quasi-rents) fall, but that is because output and employment fall; **the fall in formal firms profits is not translated into higher workers wages**. Formal wages increase because the supply of labor to the formal sector falls.
- Even if social security is fully valued, there will **always** be an informal sector; **there is an efficient level of informal employment**.

# The labor market with social security and social protection



Social protection programs act like a subsidy to non-salaried employment, which is **additional** to the tax on salaried employment associated with an undervalued social security system. **In Mexico the difference between K and M is about 35%.**

# Note that:

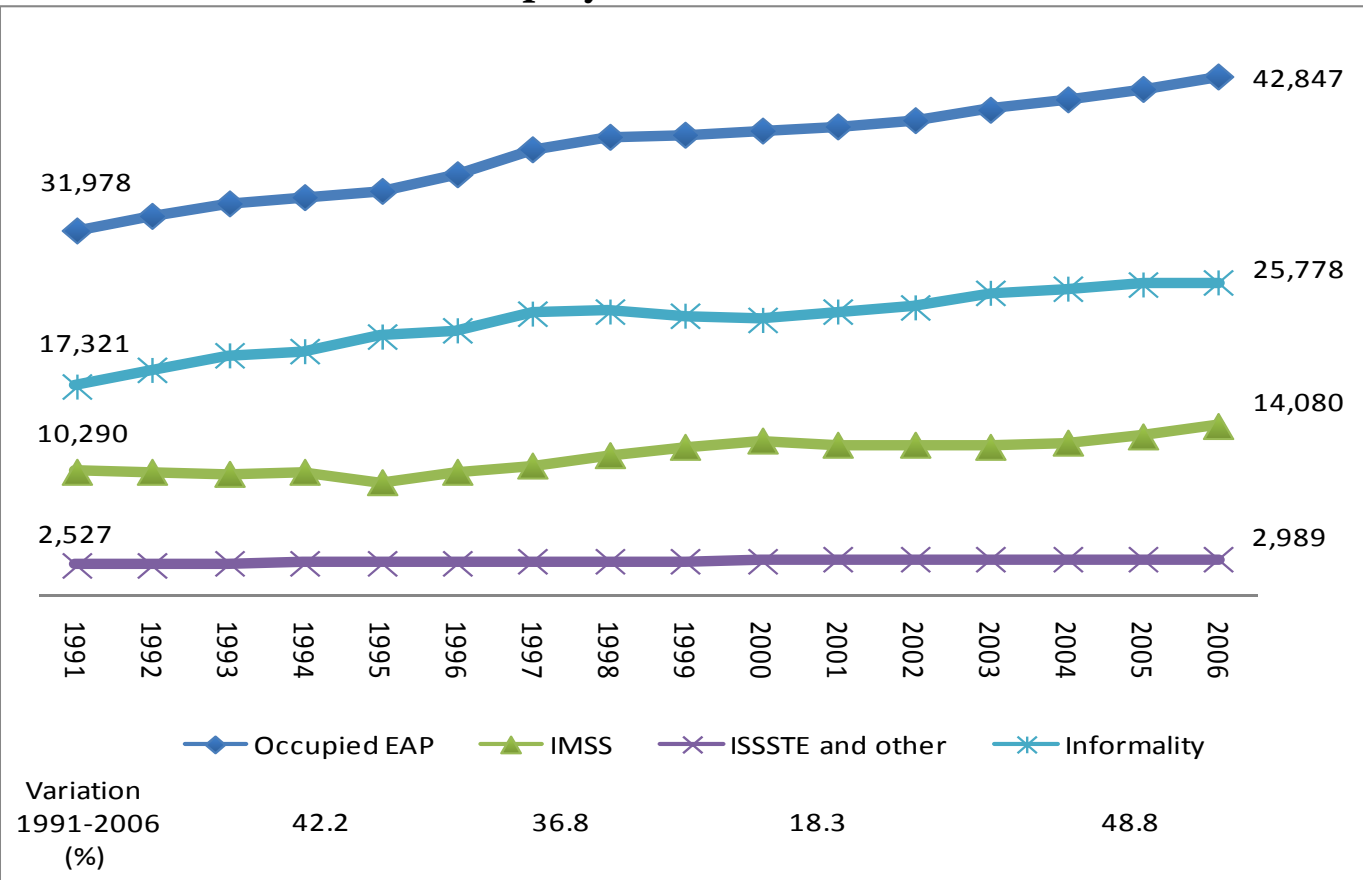
- As social protection programs increase, **the average productivity of labor in the economy falls**.
- However, if one ignores the issue of who pays for these programs, **the utility of all workers is higher** (this divorce between workers' utility and workers' productivity creates deep political economy problems).
- Social protection programs have **contradictory effects** on the government's social objectives, e.g., more workers are covered by health insurance but fewer workers save for retirement or for a house (as formal employment falls).

# Productivity growth is lower under informality

- Levy (2008) shows that firms' investment decisions are tilted towards privately profitable but socially inefficient projects that raise the economy's capital-output ratio and **lower the rate of growth of GDP**.
- Fanjzylber et al. (2006) show that less than 10% of micro and small firms **receive credit** or participate in labor training programs in Mexico.
- Lopez-Acevedo and Tan (2006) show that small and micro firms in Mexico are between one fifth and one sixth less likely than large firms to **invest in worker's training**.
- Lopez-Acevedo (2006) finds that small firms in Mexico are substantially less likely to **adopt new technology** than large firms.

# Mexico's growth is characterized by persistent informality

Formal and Informal Employment and Total Labor Force, 1991-2006

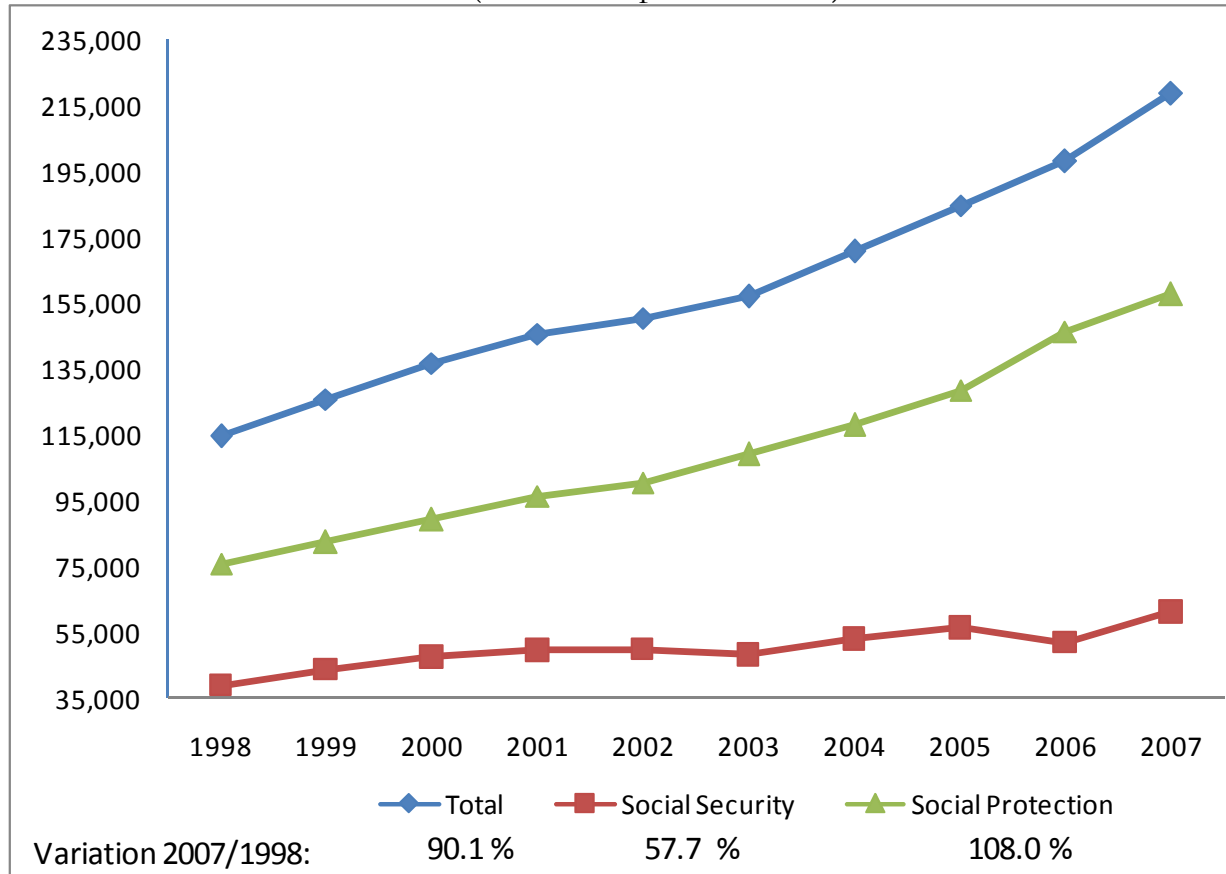


Informal employment persists not because wages are rigid, but because: (i) there will **always** be non-salaried labor, and (ii) because firms and workers **find in informality a profitable option.**

Between 1991-2006 the average growth rate of GDP has been 2.9% and the growth rate of the labor force 2.5%. The total increase in the labor force equals 13.6 million workers distributed as follows: 0.46 million public, **3.9 formal**, **8.4 informal** and 0.9 unemployed.

# Unfortunately, budgetary resources for social protection are increasing, fostering informality.

Public Resources for Social Programs, 1998-2007  
(millions of pesos of 2007)



Subsidies for social protection programs are **three times** subsidies for social security programs (1.7 vs. 0.6% of GDP).

# Composition of social spending, 2006 (%GDP)

	Social security	Social protection	Total
Wage-based contributions	2.8	0.0	2.8
General revenues	0.6	1.7	2.3
Total	3.4	1.7	5.1

The redistributive impact of Mexico's social programs is weak. Because wage based contributions do not redistribute profits to wages, social programs serve to at most redistribute 2.3% of GDP from other households to workers.

However:

- the largest share of resources are for programs that foster informality, and
- some resources come from oil rents, not taxes on high income households.

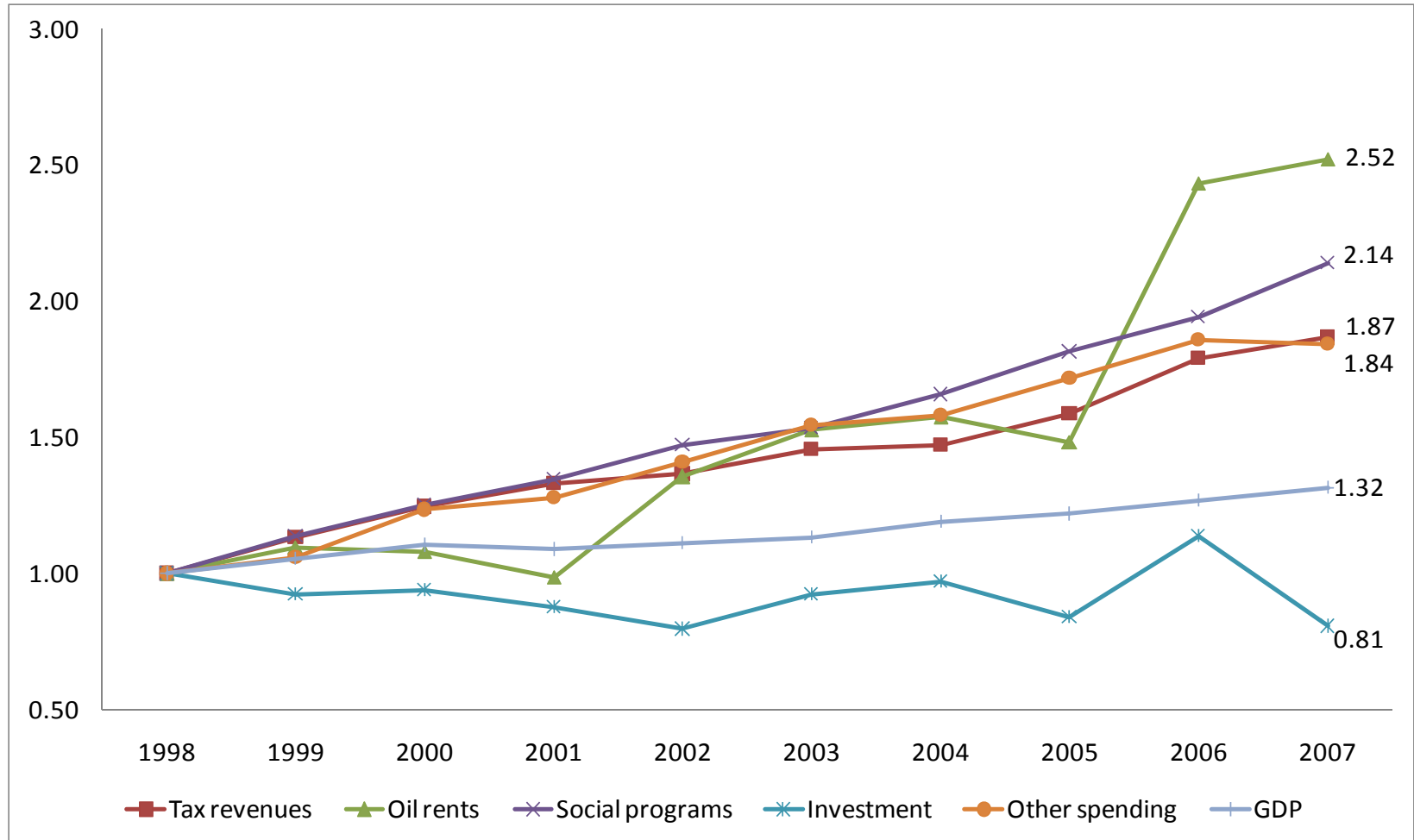
# Social spending need not always be redistributive, it depends on how it is paid for:

## Sources of Funds to Pay for Subsidies to the System of Social Benefits

Effects absorbed in one period	Effects absorbed through time
<ul style="list-style-type: none"><li>• reducing government current spending in other programs</li><li>• increasing consumption taxes</li><li>• increasing income taxes</li></ul>	<ul style="list-style-type: none"><li>• reducing public investment</li><li>• extracting more oil (or hoping for a positive and sustained price shock)</li><li>• borrowing money</li></ul>

Need to differentiate between reducing somebody else's **current** consumption to pay for social programs, vs. reducing everybody's **future** consumption.

# Index of Selected Fiscal Indicators, 1998-2007 (1998 = 1.00)



To what extent do social programs contribute to reduce inequality in Mexico?

# In sum:

- Institutions and laws have "boxed in" the Mexican government in a dilemma: covering only salaried workers with social security and leaving millions of workers unprotected, or extending some benefits to non-salaried workers promoting informality. Mexico's choice has been for the latter option.
- The result is that Mexico imposes a large tax on legal salaried labor ("formal") and uses fiscal resources to subsidize illegal salaried labor and legal self-employed and comisionista labor ("informal") and pays for this with a mix of oil rents and reduced public investment.
- These policies contribute to low growth of GDP and productivity in Mexico and are an obstacle to raise workers' real wages.
- At the same time, informal workers are only partially protected against various risks.

**Can Social Policies Increase Workers'  
Welfare, Equity and Growth?**

# The policy challenge has two parts:

- From the **social point of view**, to insure that instead of some workers getting social security all the time, some social protection all the time, and some social security and social protection at various point of time, all workers get the same social benefits all of the time;
- From the **economic point of view**, to provide benefits with programs that by-pass the current distortions in the allocation of labor and capital and place the economy on a higher growth path with faster increases in labor productivity, and to insure that these programs are effectively redistributive and fiscally sustainable.

**It is essential to focus on both objectives simultaneously.**

# A simple proposal for equity and efficiency

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Provide (almost) the same social entitlements to all workers and pay for them with the same sources of revenue.

To achieve this:

1. Sharply separate between the objective of protecting workers against various risks and the objective of redistributing income to some workers;
2. Focus of the results of policies, not on their intentions;
3. Pragmatically mix instruments to effectively reach results.

# Is efficiency necessarily higher?

## status-quo

(10.1) [ lost productivity from labor mis-allocation + lost productivity from capital mis-allocation and other obstacles to firm's growth + efficiency costs of raising 2.3% of GDP in subsidies to social protection and social security programs ]

## core proposal

$\Leftrightarrow$  [ efficiency costs of raising X% of GDP in subsidies for universal social entitlements ]

Two central questions:

1. How much do universal social entitlements cost compared to the status quo?
2. Can they be paid for with a less distorting source of revenues?

These questions need to be distinguished from the question of whether universal social entitlements are or not redistributive.



# Social policy: status quo vs. core proposal with redistribution

Status quo	Core proposal
Worker's utility	
$U^{SQ}_f = w^{SQ}_f + \beta_f T_f - t_w$ $U^{SQ}_i = w^{SQ}_i + \beta_i T_i - t_w$	$U^{CP}_f = w^{CP} + \beta^{CP} T^{CP} - (t_w + \Delta t_w) + s^{CP}$ $U^{CP}_i = w^{CP}_i + \beta^{CP} T^{CP} - (t_w + \Delta t_w) + s^{CP}$
Government's budget	
$(t_w)L \leq [\theta_f T_f L^{SQ}_f + T_i (L^{SQ}_i + L^{SQ}_{if})]$	$(t_w + \Delta t_w)L = (T^{CP} + s^{CP})L$

To achieve both the objective of changing the composition of **all** worker's consumption and increasing the level of **some** worker's consumption **you need two instruments**. The proposal is to Slutsky-compensate (or more) a subset of workers with direct income transfers:

$$U^{CP}_f - U^{SQ}_f = (w^{CP}_f - w^{SQ}_f) + (\beta^{CP} T^{CP} - \beta_f T_f) - \Delta t_w + s^{CP} \geq 0$$

# A digression: full de-linking and unbundling are not socially desirable

Some risks are directly associated with salaried labor, so:

Universal social entitlements:

$T^{CP} = [\text{health insurance} \oplus \text{retirement pensions} \oplus \text{life insurance} \oplus \text{disability insurance}]$

Additional entitlements for salaried workers

$T_f^{CP} = [\text{work-risk insurance} \oplus \text{severance pay (unemployment insurance ?)}]$

This implies that:

- $T_f^{CP}$  should be paid by wage-based contributions and  $T^{CP}$  for all workers from general revenues.

- Wage based contributions would fall from about 35% to 5% of wages. Also, one would expect that  $\beta_f^{CP} > \beta_f$  so the efficiency loss would be fairly small.

# How much would universal entitlements cost?

**Estimated Net Fiscal Costs of Universal Social Entitlements**  
(millions of pesos of 2007)

	<b>Workers and firms contributions</b>	<b>Government contributions</b>	<b>Total 14.1 million workers</b>	<b>Total 41.4 million workers</b>
<b>1. Health insurance</b>	90,275	39,154	129,429	375,344
<b>2. Retirement pensions</b>	58,681	18,932	77,613	184,561
<b>3. Life and disability Insurance</b>	23,177	0	23,177	54,896
<b>Gross total</b>				614,801
<b>Less: resources already in budget</b>	172,133	58,086	230,219	218,586
<b>Net total</b> (% of 2007 GDP)				396,215 (4.3)

$\Delta t_w^* = 4.3\% \text{ GDP}$

But  $T_f L_f$  was 2.7% and now is 0, so **net**

$\Delta t_w^* = 1.6\% \text{ GDP}$

The proposal implies increasing the VAT and reducing labor taxes effecting **a large change in the composition of taxation from labor to consumption**, while compensating low wage workers.

# Note that:

- In 2006 VAT revenues in Mexico were only 4.2% of GDP, with an average VAT rate of around 8%;
- The proposal takes advantage of Mexico's extremely high unequal distribution of income and consumption: out of every peso of additional revenues from VAT only 10 cents are required to Slutsky-compensate the first two deciles and 27 cents the first five deciles (Davila and Levy, 2003);
- The proposal implies doubling the VAT (with a homogeneous rate of 15%) while leaving workers up to the third or fourth decile of the distribution at least as well off, if not better;
- This implies collecting about 5% of GDP more in VAT, using around 4.3% of GDP to pay for  $(T^{CP})L$  and about 0.7% of GDP to pay for  $s^{CP}(L)$ .

It is feasible to construct an equilibrium that: (i) is more efficient (static and dynamic), (ii) is fiscally sound, (iii) realizes the government's social objectives of protecting workers against various risks, and (iv) is more equitable.

# Conclusions:

- In an ever more global world, it is essential that firms and workers face the right incentives to increase productivity and create good jobs. This requires flexibility, minimal taxes on labor and a context of legality where firms can access commercial credit, invest in training their workers, and adopt new technologies. Countries that fail to create this environment will be increasingly unable to compete internationally, and sooner or later their workers will suffer as real wages stagnate.
- At the same time, workers need to be protected against various risks and, in countries with high inequality like Mexico, the government has to carry out effective redistribution towards those in need.
- Under Mexico's current institutional structures and mix of social programs, **neither of these objectives is being properly met.**

- Mexico needs a radical change in its social and labor policies, based on a recognition that at present they are not effective, and that poor workers are being hurt the most;
- This change is technically and politically complex, but it needs to begin with a recognition of **two points**:
  - (i) the instruments used to protect workers in general should not all operate through the labor market and,
  - (ii) it is possible to design fiscally sustainable policies that are better for workers, for firms, and for Mexico as a whole.

**THANK YOU**