



THE LONDON SCHOOL  
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# Financing the SDGs, Incentives and Multilevel Governance: South-South examples and lessons for Indonesia

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# Fiscal Objectives for SDGs in multilevel countries

- Generate adequate revenues to meet minimum SDGs
  - At National, State and Local levels
  - Meeting MDG/SDG targets
  - Provide “own-source” revenue-handle for accountability
- And for sustainable access to credit for investment, particularly at the sub-national level
- Reduce the cost of doing business
  - Enhance national competitive positions
- Generate incentives to use damaging or scarce resources effectively (e.g., carbon use and emissions)
- Enhance equity
- Provide information to “stop the cheating”

# Tax and Social Policy in the presence of informality—project on Mexico and Indonesia

- Santiago Levy (2008) *Good intentions bad outcomes*
  - In Mexico: universal benefits financed by taxes that fall on formal firms (payroll) encourage informality (cheating)
  - Recommended shift to general revenues and non-distorting VAT
    - But non-oil taxes full of holes and stuck around 10% of GDP
- Mexico (LSE-based research) working with Hacienda (MOF),
  - background analyses for 2013 reforms—with lessons from Chinese reforms
  - Strengthened revenue and competitive position will be critical in context of turbulence in trade within the continent—better integration with rest of the world possible
- Indonesia (LPEM with support from JICA)
  - Incentives to evade contributions for health-care; plus low level of non-oil tax revenue
  - Possible fiscal space for health care—role of different levels of government
  - Lessons from Mexican failures and successes

# Plan of presentation....

- What revenue envelope is needed for sustainable growth?
- Some success stories, amid lots of failures
  - Singapore
  - Lessons from China's 1993/4 reforms
  - Mexico, 2007 and 2013
- Lessons for efficient energy-use and health care in Indonesia
  - Improving governance: Institutions, incentives and generation and management of information
  - Clean cities and multilevel finance—importance of tax-benefit links to align incentives

How much revenue is needed for the SDGs?

# Overall tax revenue envelope needed...

- The MDGs implicit requirement of around 18% tax/GDP ratio
- SDGs, in addition include a component for sustainable investment
  - As significant unmet needs in all parts of the world, including Asia,
  - There also has to be access to private financing, in a fiscally sustainable manner, especially at the sub-national levels
  - Avoid generating or aggravating economic crises, such as in post-2007 Europe (see Ahmad Bordignon and Brosio 2016)
- Consequently, any significant access to credit at sub-national levels, including borrowing and PPPs, has to be linked to own-source revenue generation over time
  - i.e., over which a jurisdiction has control at the margin
- Consequently, likely need more than 18% for tax/GDP target, but much depends on
  - a) the role and nature of the state (more in multilevel countries, (e.g., Indonesia and Pakistan, than small single level unitary states such as Singapore) and
  - b) Whether or not public investment generates growth in a sustainable manner

# Elements of sustainable growth

- **Public investment cornerstone of sustainable development agenda, SDGs and COP22**
  - Critical in the international context, e.g., in China and the EU, and
  - Reformulation of investment needed for sustainability (in the WB's best case scenario: "Chile", see Ahmad and Viscarra, 2016 IADB)
  - But investment and connectivity not always sufficient e.g., EU (Ahmad, Bordignon and Brosio, 2016)
- **Sustainability**, linked to new clean urban "hubs", to enhance overall production possibility frontier
  - Investment, including cross-border connectivity to raise overall potential, and better utilization of comparative advantages
  - Dynamic effects as sustainable growth rises, so does the potential to finance additional infrastructure (formally, the Simonsen conditions)
- **Must focus on income distribution** as well as **environmental considerations**
- **Vulnerability to shocks**: diversification critical...
  - some countries have had high growth but become more dependent on primary exports (Chile), and become more vulnerable to shifts in trading patterns

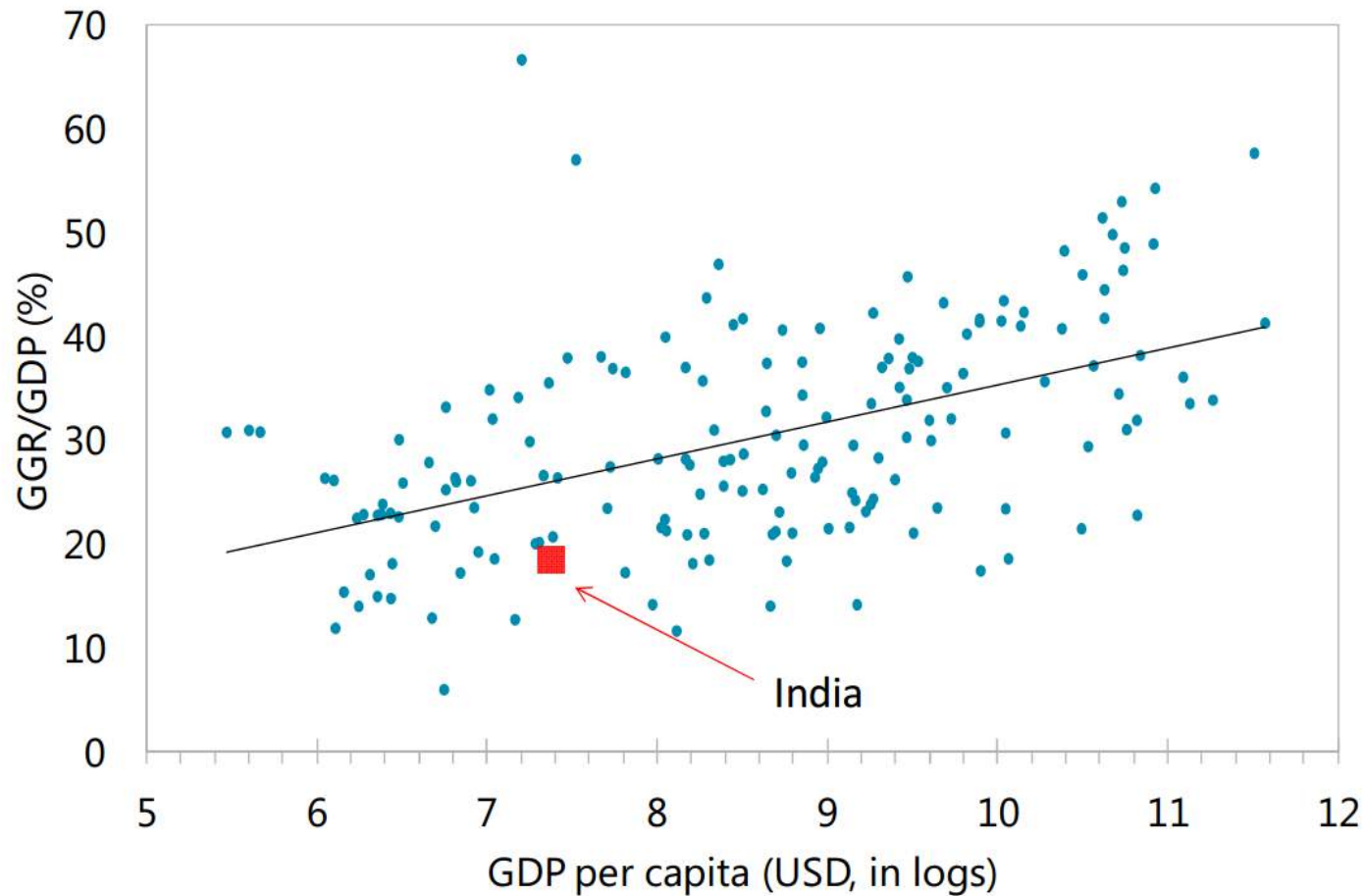
# Fiscal sustainability matters, but....

- **Feedback effects from sustainable public investments and growth to ability to finance investment**
  - Subject to the minimum requirements for investment in local public goods and services, to supplement connectivity infrastructure
  - Then Simonsen conditions apply to the risk management issues
- **Increased reliance on primary/single commodity exports (reduced complexity) increases vulnerability**
- **Some countries in difficulty at debt/GDP ratios below the “rule of thumb” benchmarks (60% debt stock and 3% deficits)**
  - Argentina in 2000 (with debt stock under 50%)
  - Spain and Ireland with debt/GDP ratio well below Maastricht levels, Germany and France above, but the former group was more vulnerable (see Ahmad, Bordignon, Brosio, 2016, *Multilevel Finance and the Eurocrisis*, Elgar)
- **Others with debt stock above the benchmark may have more room with faster and more stable growth**



# Is 18% tax/GDP enough?

**General Government Revenue and GDP per Capita, 2012  
(excluding oil exporters and microstates)**



# Asian experiences with SDGs--education

- Asia has some of the best performing countries/regions in the world
  - PISA (OECD, December 2016, 7 Asian countries in the top 10 global rankings
    - (1) Singapore; (2) Japan; (4) China Taipei; (6) China Macau; (7) Viet Nam; (8) China\_Hong Kong; (9) China\_Beijing-Shanghai-Jiangsu-Guangdong
    - China\_Shanghai was top of the previous PISA rankings
  - European countries: (3) Estonia and (5) Finland; overtaken by Asia
- But also some laggards
  - Pakistan, continues to struggle with literacy, basic services
    - spending on education has declined over the past decade despite a vigorous attempt to eliminate overlapping responsibilities (18<sup>th</sup> Amendment to the Constitution, 2011)
    - Additional share given to provinces in December 2010 National Finance Commission Award
    - Largely linked to failure in the domestic resource mobilization agenda

# Asian experiences....revenue envelopes

- China and India have done well to raise overall tax/GDP ratio for general government to around 18% (China from 10% in 1992/3)
  - But not enough as spending and investment needs are great,
  - Split VAT base causes distortions and adds to cost of doing business
    - China completed integration of VAT on goods and services in May 2015
    - India: Constitutional Amendment for integration of the VAT base
- Pakistan lagging (around 10%) provisions and gaps/exemptions and split bases in virtually all major taxes
  - National Finance Commission Award (December 30, 2009) expected tax/GDP ratio to go to 15% by December 2015 from 9.3%
  - Major tax reforms did not happen, ***instead VAT base was split between goods and services*** (latter assigned to provinces revenues)
  - Major revenue effort at provincial level, largely focussed on transaction and nuisance taxes that did not stem revenue haemorrhage
  - Three national tax amnesties in this period
  - Tax/GDP ratio stood at 9.5% in December 2016 ((NFC report to Parliament)
  - ***Turned the spending assignments into unfunded mandates***

# Pakistan: Ineffective Tax-benefit linkages?

- For IMF SBA in 2008, the authorities promised to revamp the VAT and eliminate loopholes, along with energy price reforms to close the revenue-gaps
- Conditional Cash Transfer (CCT ) the Benazir Income Support Program, modelled on Mexican *Oportunidades* to be introduced (with WB and bilateral financing)
  - To compensate “losers” and gain political acceptability
- However:
  - CCT correctly went to poorest rural households, while most of the “losers” were fixed and low income people in urban areas
  - CCT was implemented, but the tax reform was not
- Tax/GDP ratio remains below 10%, despite new WB loan of \$300m for new tax administrations
- Repeated amnesties without credible sanctions or improved plugging of hole ineffective in raising revenues
  - Create incentives to wait until the next amnesty

# Ineffective taxes and rent-seeking: why some countries seem to be stuck in quick sand?

- Similarities between Pakistan and Mexico (before 2013)
- Split bases (goods and services) problematic
  - Tax breaks for distributional objectives, or encouraging sectors, generates rent-seeking behaviour that becomes entrenched over time
  - Harms competitiveness (e.g., vis a vis competitor countries)
  - Insufficient financing for basic services
- ***Incomplete information on value added chain*** leads to incentives to cheat and **informality, compounding...**
- ***High effective corporate tax rates*** a major disadvantage
- But first some success stories in Asia (Singapore and China)

# Singapore

PISA leader, with low, but efficient and effective tax/spending system

# Singapore: tax reforms to encourage investment and trade

- VAT introduced in 1994, as a mechanism to reduce the Corporate Income Tax of 40%, as well as taxes on assets that added to the cost of doing business
- VAT design
  - Single low rate
  - No exemptions
  - No compensation, idea is to create investment and full employment
- Over time, CIT reduced to 17%, while VAT raised to 7%
- Relatively low tax/GDP ratio (less than 15%)
  - But most efficient tax administration, and well-prioritized public spending (education 22% of the budget)

# Costs of tax administration

Country	Administrative costs for tax administration/ GDP (at market prices) %							Variation	Significant factors affecting comparability
	2007	2008	2009	2010	2011	2012	2013	2013-08	
Italy	0.284	0.185	0.198	0.147	0.139	0.152	0.188	0.002	Some major costs not included
Japan	0.137	0.141	0.149	0.143	0.142	0.152	0.148	0.007	
Korea	0.104	0.112	0.113	0.106	0.103	0.098	0.099	-0.014	
China	n.a.	n.a.	n.a.	n.a.	n.a.	0.130	0.121	n.a.	
India	n.a.	0.042	0.043	0.034	0.029	0.029	0.028	-0.014	Direct taxes only
Malaysia	0.135	0.111	0.153	0.078	0.081	0.102	0.122	0.011	Costs exclude indirect taxes
Singapore	0.070	0.082	0.086	0.083	0.088	0.083	0.088	0.006	
Source: Survey responses, OECD Statistical Database, Eurostat and World Bank Statistics.									



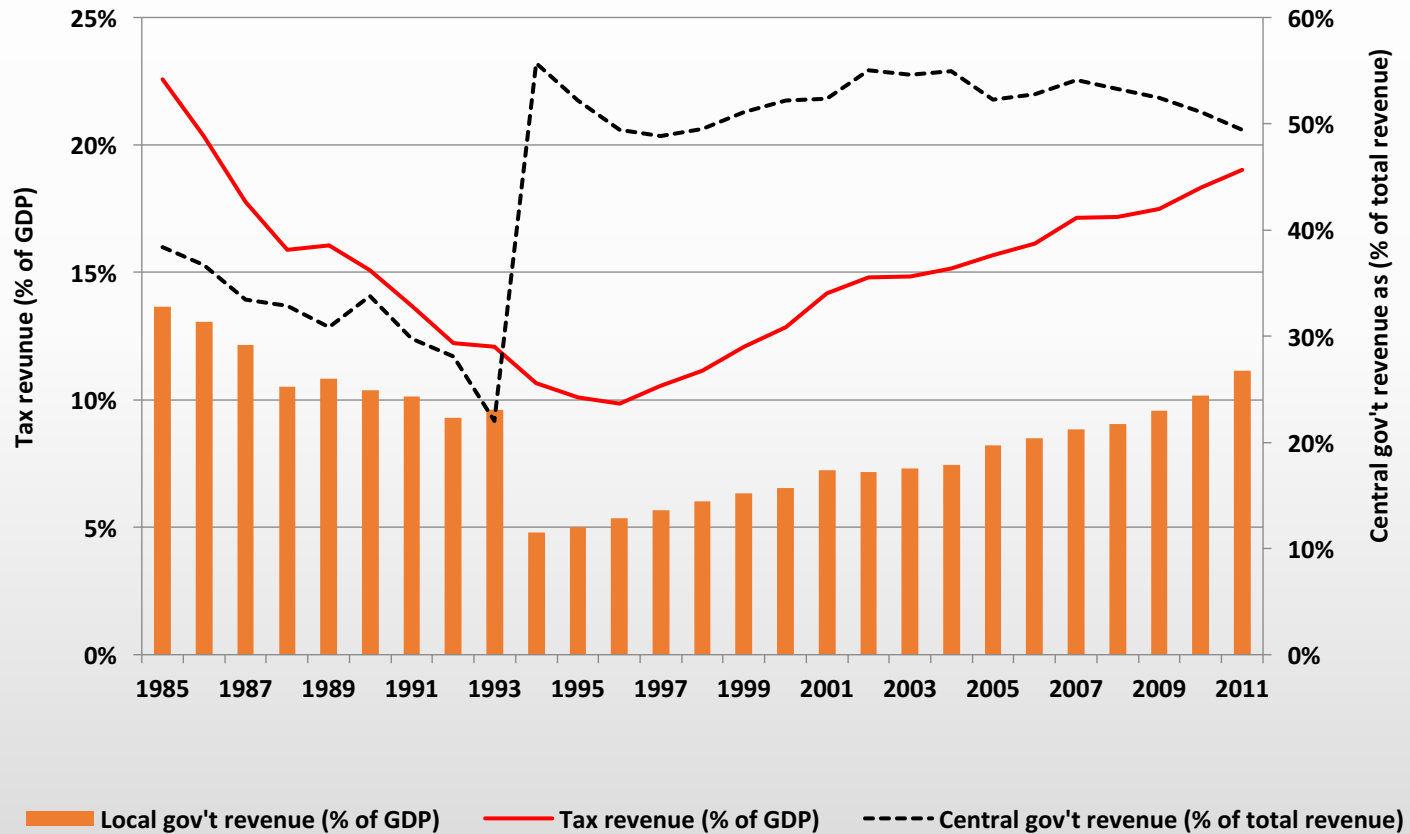
# Success story: Insights from China's reforms

From 1993/4 to 2016

# China: Structural change since 1980s

- Fiscal responsibility system entailed reducing the tax on SOEs
  - Tax/GDP ratio dropped sharply from 25% to 10% by 1992
  - And central share from 50% to 25%, as local governments prioritized their own spending before sharing revenues upward
  - By 1992/3 central government ability to conduct macroeconomic policy, redistribution or investment severely curtailed
- 1993/4 reforms: based on creating a central tax function (SAT) and a new tax: VAT on goods to be shared with local governments
  - Lump sum guaranteed transfer to ensure no province lost (stop-loss provision, used in Mexico's 2007 reform)
  - Revenue-share from VAT and income taxes benefitted rich provinces
  - Equalization system, provided an inducement for the poor provinces
  - Revenue returned: created space for investment for coastal "hubs", critical for sustained growth over the next two decades
    - No individual compensation—but maintenance of full employment
    - Major reduction in poverty (over 700m; as 150m migrated to coastal hubs)

# China: Redressing fiscal vulnerability



Source: Ahmad, Rydge and Stern, 2013, *China Development Forum*

# China: Need for additional taxes for further structural change

- Integration of the VAT on goods and services—replacing local business tax (on services) completed in May 2016
  - Reduce cost of doing business
  - But removes last tax handle in the hands of local governments
- Address problems of success:
  - Increasing inequalities
    - Need to expand personal income tax beyond withholding on wages; e.g., piggy back on central base
    - Address failure of property tax
  - Congestion and pollution
    - Adjustments in energy prices and creation of a carbon tax
- Own-source revenues at local level as basis for access to credit
  - Rationalization of local government borrowing and
  - Lay basis for new internal hubs:
    - to supplement national investments in cross-border connectivity (One Belt One Road), links with SE Asia (Indonesia), Central and South Asia, Europe

# The Mexican reforms in 2007 and 2010

Mixed success and political economy lessons from failure

# Creeping erosion of tax bases in Mexico...

- As in Pakistan, a non-competitive trading regime in Mexico was the cause for preferences and exemptions both for the income taxes and the VAT
- And prior to NAFTA, there was considerable emphasis on the creation of SEZs (the maquiladoras in the border zone with the US)
  - Designed to attract US investment and provide cheap labour
  - And for the US firms to make higher profits, and keep Mexican workers in Mexico
  - Firms exempt from income tax and VAT
- Lower VAT rates in the border regions adjacent to the maquiladora
- Subsequent to NAFTA, Mexico lifted trade restrictions, and the exchange rate was market-determined
- But the preferences remained—very hard to remove once bestowed
- Successive Finance Ministers (since the late 1990s) tried to initiate reforms to fix the income tax, or others to fix the VAT
  - Because of strong vested interests, none of the reform attempts worked
  - The non-oil tax/GDP ratio stagnated at around 10%, VAT efficiency of 25%,
  - Close parallels with Pakistan

# 2007—IETU to “partially” close loopholes in the CIT

- Carstens, as Finance Minister, in 2007, did not have the political support to fix the VAT
  - **But tried to close the holes in the CIT**
    - A Gross Assets Tax (GAT, popularized in Latin America by the IMF) was distortive and had also not worked, was replaced by:
      - A unique enterprise based minimum VAT-like tax, IETU credited towards the CIT, that was less distortive than the GAT
- **The introduction of the IETU was based on principles used in the 1993/4 Chinese reforms**
  - Rationalization of the transfer system, with greater clarity in the untied revenue-sharing arrangements, and also in the special purpose transfers
  - A stop-loss provision so that no state would lose as a result of the reform
- But revenue impact was small, half percent of GDP, and began to erode as political pressure was applied

# Lessons from failed reform attempts

- In 2010 there was **an attempt to fix the VAT** by adding additional amounts paid to recipients of the CCT (Oportunidades), as in Pakistan
  - CCT had been introduced, successfully, in Mexico in the late 1990s to phase out the generalized tortilla subsidy, and had caught the imagination of the IFIs
  - As in Pakistan, the VAT reform failed—the CCT did not address the main losers from the VAT reform
- At the same time, the **vehicle tax, *tenencia*, was fully devolved** to the States
  - They stopped collecting it—ostensibly because of competition across states, but mainly because
  - States had access to MOF transfers at the end of the year, in case of deficits
  - So the entire transfer system had become “gap-filling”
  - And states had no incentives to raise own-source revenues or even manage their spending efficiently
- States also **refused to avail of a piggy-back on the PIT** that was available to them
- The main source of **financing for states remained the *nomina*, or payroll tax**,
  - Federal Government carried the political burden, as it also covered social benefits at the national level



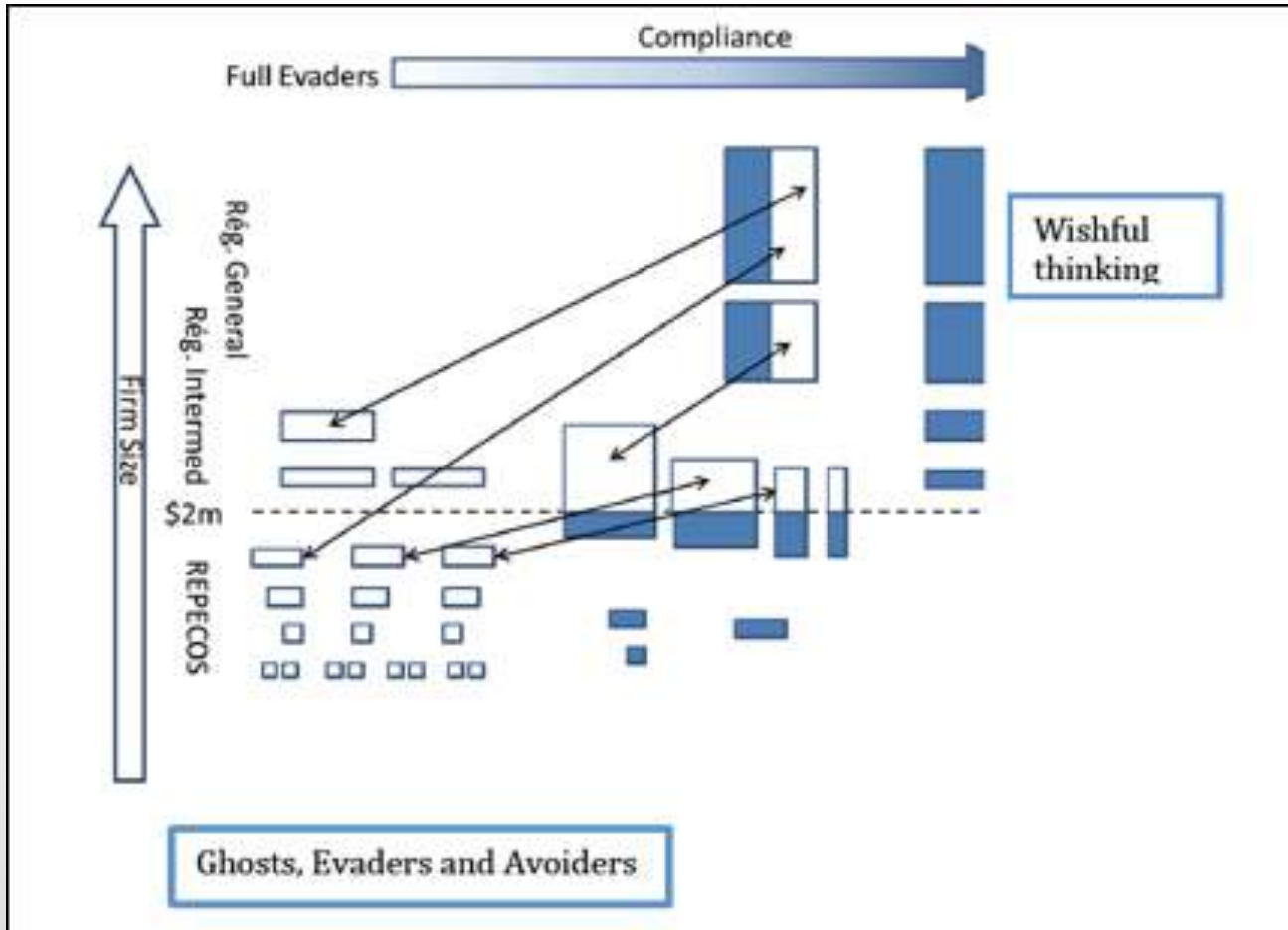
# Good intentions, bad outcomes

- Santiago Levy (2008) argued:
  - Universal benefits financed by “distortive taxes” that add to the cost of doing business
  - Leads to informality, but not all informality is bad or illegal (Kanbur and Keen), e.g., in rural areas
- **“Informality” as evading the payment of taxes or social contributions**
  - Applies to firms of all sizes, as they hide output (inputs), employment, and profits; and workers hide wages by accepting short-term contracts and avoid paying contributions
  - leads to less efficient use of resources, and lower growth potential
- ***Recommendation: reduce high social contributions and shift to VAT that does not add to the cost of doing business***
  - Same issue arises in S. Europe, post crisis, where exchange rate adjustments are not possible—shift from high social contribution to VAT is “fiscal devaluation”
- But not possible to rely on “Swiss cheese” VAT or CIT in Mexico

# Incentives to cheat, plus ability to get away with it

- **Split bases for VAT and Income taxes**
- REPECOS (small taxpayers regime (below ~US\$ 250k administered by states) provided a convenient shelter from SAT audit
  - No incentive for states to chase taxpayers, given transfer design (year end gap-filling exercise);
    - Evidence: bunching at lower end—minimum required to keep SAT at bay
    - 90% + evasion (SAT assessment)
  - convenient mechanism even for larger firms to “hide” production
- Made worse by Maquiladoras (Special economic zones); and lower border rates
- Progressive deductions and exemptions continue to nibble away at the “Swiss cheese” of tax base:
  1. ***Temptation effect*** (generates incentives to cheat)
  2. ***Information gaps*** (limits possibilities of offsetting cheating?)

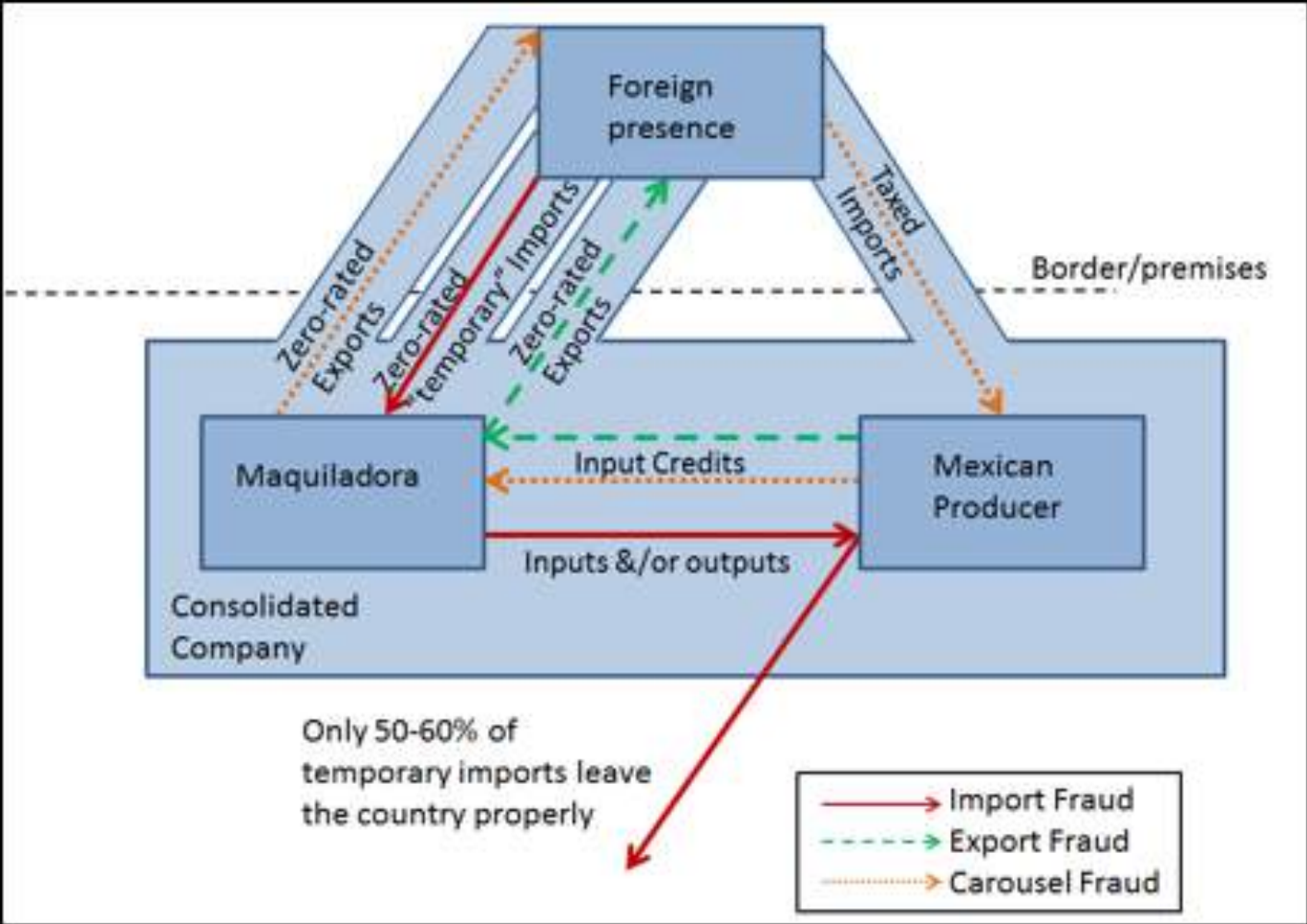
# Mechanisms to cheat...



# Special Economic Zones add to cheating--- Maquiladora sink-hole

- Firms shifted income tax liability to maquiladora subsidiary
- Carousel fraud
- Import fraud
  - VAT free goods smuggled into Mexico creating problems for domestic manufacturers
- Only lost revenues and create distortions

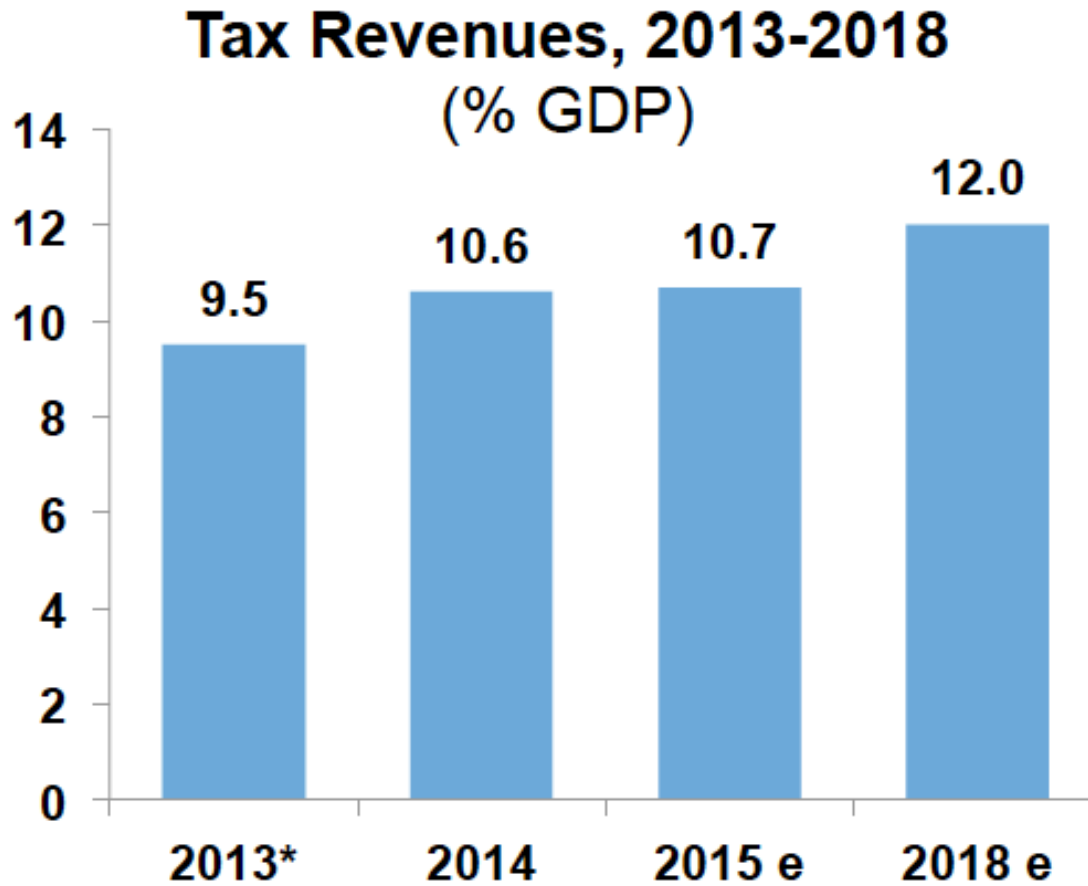
# SEZ's (Maquiladoras) play a role in this



# The 2013 “package” of reforms: meant to affect structural change, not revenues

- Tax policy, all the main taxes that were impossible to touch previously
  - Eliminated the special provisions in the VAT
  - Rationalized the CIT
  - Minimum asset tax (IETU) abolished
  - Carbon tax, above a petroleum price set at world prices
  - Excises on “bads”
- Blocked the ability to cheat by integration the small taxpayer regime (RIF)
  - Simple cash-based accounting packages issued by SAT to taxpayers
  - Must issue electronic invoices
  - Reverses the segmentation of the tax base, all firms subject to SAT audit
- Reliance only on basic (social) pension for those without occupational pension
- CCT: *Oportunidad* not used, replaced in 2014 by *Prospera*, a program to encourage small businesses and encourage employment

# Initial projections of the expected revenues (2014)



Source: SHCP

# Excises and carbon tax: initial benefits during 2014 (0.3% of GDP)

Excises on Sodas	<ul style="list-style-type: none"><li>• 10% reduction in consumption of sodas</li><li>• 13% increase in purified water</li><li>• Revenue generated 0.1% of GDP</li></ul>
Excises on confectionery	<ul style="list-style-type: none"><li>• Reduction of 1.1% in sale of chocolate products</li><li>• Reduction of 0.5% in sale of sweets and confectionery</li><li>• Revenue generated 0.1% of GDP</li></ul>
Carbon Tax	<ul style="list-style-type: none"><li>• Reduction in carbon emissions of 22.2 million tons</li><li>• Reduction of 432,000 tons of carbon monoxide</li><li>• Reduction of 99,000 tons of particulates</li><li>• Revenue generated 0.1% of GDP</li></ul>

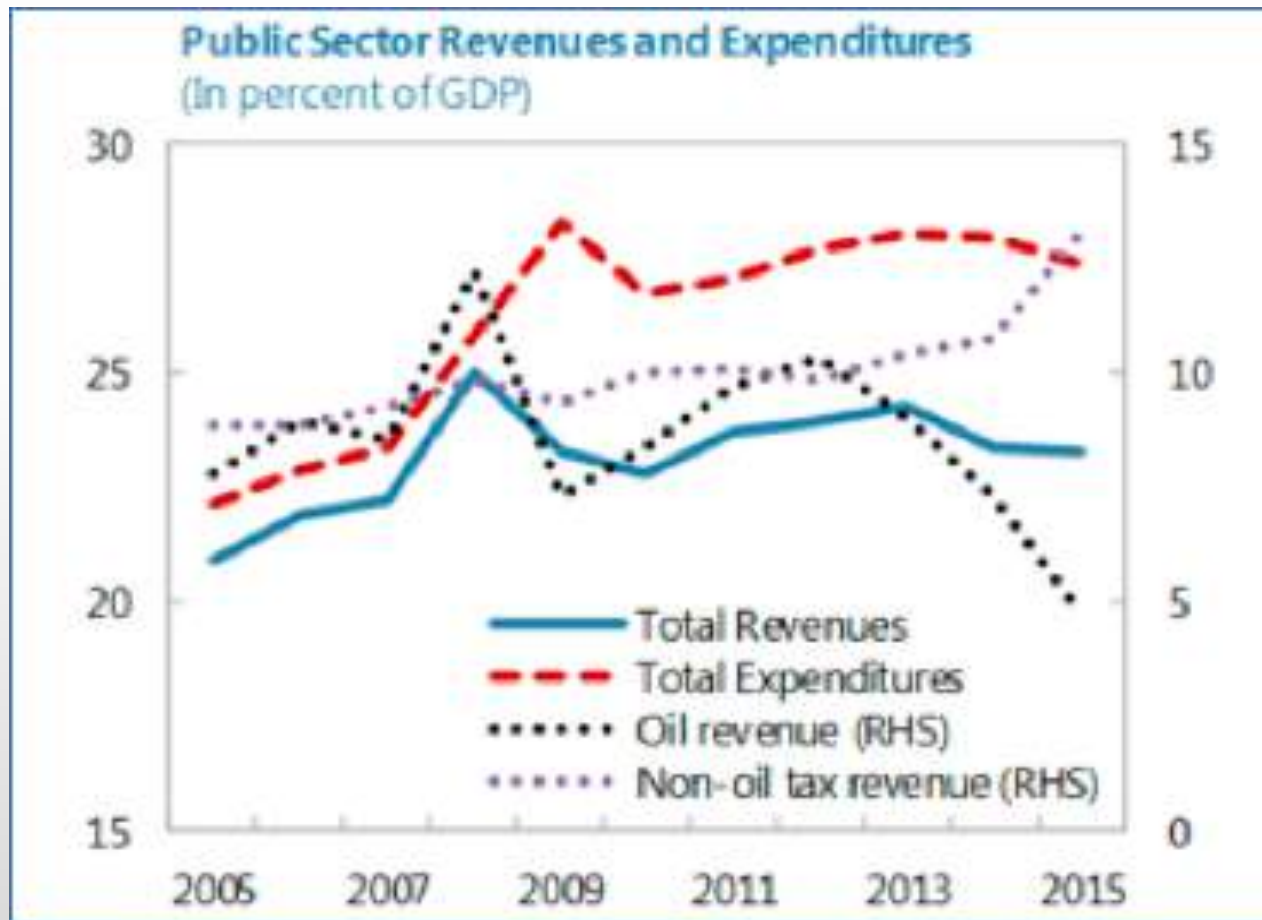
Source: Mexican Ministry of Finance.



# But the reforms quickly began to raise revenues...

- Additional revenues pushed non-oil tax/GDP ratio to around 14% in 2015 (+3.5% of GDP above 2012 level)
- Although VAT revenue increase was small initially (+ 0.5% of GDP to a total VAT of 4% of GDP in 2014)
- Main impact was on the Income Tax: +1.7% of GDP in 2015 relative to 2012
- Carbon tax: + 1.4% of GDP,
  - although political pressure to further increases could be diffused by
  - adopting the piggy-back approach, together with
  - an equalization framework

Actual revenue performance far exceeds projections...



Turning the whole of Mexico into a Free Trade Zone....although Ford cancelled the Cruze plant in January 2017 under pressure....



# Creation of new clean “hubs” for sustainable development

- Public investment by Federal Government: new Capital airport at Querétaro
  - Small university town, attractive environment
  - Attracted Aerospace (\$1.5 bn) and BMW (\$1.3 bn)
  - Good local infrastructure
- But additional urban hubs require state and local investment in services and smaller investments to link to national grids
- State and local incentives remain a problem

# Additional work needed on state and local incentives.....

- Payroll tax (nomína) remains at the state level; Santiago Levy critique has not been addressed
- Disincentives to implement own-source revenues linked to transfer design
  - Need to implement vehicle tax and piggy back on carbon tax (opposed by states)
  - Also piggy back on income tax to address PIT base and more effectively address spatial and interpersonal
  - Property tax is dysfunctional
- Problems with state level services, particularly education
- *Oportunidades*, generated poverty trap in Chiapas (poverty increased since late 90s, despite 75% of population receiving CCT), entitlement, diversion of funds in some states
- **Education**, problematic assignment and shared responsibilities, complex solutions that need to be revisited
- **Own-source revenues together with Equalization Transfers needed, clearer delineation of functions**
  - Indonesian experience will be useful

# Some implications for efficient energy use and health care in Indonesia

Learning from Mexico and China

# Indonesian context—energy subsidy reduction and sustainable development

- Sensible to reduce implicit and explicit energy subsidies—if not an outright positive carbon tax
- Also, using subsidy reduction to partially finance universal health coverage is a more efficient compensation mechanism than CCTs
  - Experience of Mexico with the basic pension and the carbon tax
  - CCT already tried in Indonesia
- However, disincentives for (large) firms to pay employer contributions suggests that a significant financing gap will have to be covered by general revenues
  - Illustration of the Levy “good intentions” problem
- As in Mexico, the low non-oil tax/GDP ratio is a problem, as is the dysfunctional VAT

# Importance of national tax reforms

- Clean, simple VAT as a mechanism to both raise revenues as well as provide information
  - with exemption only for non-processed food (see estimates for Timor-Leste, as extreme case)
  - Revisit the threshold
- Stop cheating in the income taxes, to follow the tax amnesty, else the Pakistan possibility of “waiting for the next amnesty” will defeat all reforms
- Needed in parallel with adjustments in energy prices/carbon tax in a multilevel context
  - More research for Indonesia needed (see Ahmad and Stern 2011 for India)
  - More important to ensure that there are no major shifts in resources across regions—evaluation of gainers and losers



# Containing health expenditures through local actions

- Many of the key basic functions are at the local level, including inter alia
  - Sanitation
  - Public health and education, including nutritional advice—this may have to be supplemented by specific excises, which could be at central or local levels
  - Mother and infant/child clinics for preventive care, nutrition and vaccinations
- Given the importance of the preventive functions, it is often in national interest, and “Special purpose transfers” may be in use
- But with imperfect information on spending and budgets,
  - no certainty that the funds will be used effectively and not diverted (as with Oportunidades in some Mexican states)
- Local incentives need to be closely aligned, but that depends on clarity of responsibilities and own-source revenues for accountability
  - May need to design taxes (e.g., carbon tax) with a local piggy-back to permit a higher marginal rate in more polluted/congested area, but with a national minimum to prevent a race to the bottom
  - Also “gap-filling” transfers, or use of “actual” factors in equalizing systems, is likely to override the incentives to use local tax handles, even if one existed

# Property taxes to anchor local access to credit, new clean cities and “hubs”

- **Typical failures with property taxes in emerging market countries, Latin America including Mexico, many Asian countries**
  - US-type model based on ownership and valuation hard to implement—abandoned in the UK
  - Self assessment option: Bogotá, may be subject to abuse
  - Presumptive approach, did not work in Delhi or Pune, and is proving problematic in Bangalore
- **Linkage with service delivery** (Marshallian principles) Ahmad, Brosio, Pöschl (2015) and (2017 on Mexico) to overcome resistance
  - Focuses also on service delivery, enhances accountability
  - Maximum and minimum “bands” legislated in unitary countries,
  - Local rate setting for accountability but avoid race to the bottom
- **Scope for electronic property registers and satellite imagery** (arms’ length administration to reduce scope for corruption)

# General lessons for emerging market economies

# Political economy and institutions critical

- Non-standard recommendations may be needed in the presence of informality
  - Lower effective threshold may be needed, by integrating small taxpayers, while keeping focus on the largest
  - Full value-added chain essential to generate information, stop cheating and base shifting
- Chinese approach to administration: match all invoices (Golden Tax Project) to block cheating and also facilitate efficient and accurate VAT refunds for exporters
- Reduced cost of business, enhanced competitive position
- Political economy of offsetting opposition to each main tax by putting them together, minimum compensation needed
- But work on sub-national taxes and transfers remains

# Key lessons

1. Raise revenues efficiently for sustainable growth and job creation
  - Taxes that do not add to the cost of doing business
  - Basis for addressing inequalities and financing clean cities or sustainable “hubs”
2. Appropriately design tax and social policies that generate sustainable growth
  - Avoid distorting benefits that create a “poverty trap”
3. Attention to institutions and incentives to cheat at each level of administration