

# Commonwealth Seminar on Fiscal Policy Options for Sustainable and Resilient Development

13 April 2023



The Commonwealth

# Fiscal Policy Options for Resilient and Sustainable Development

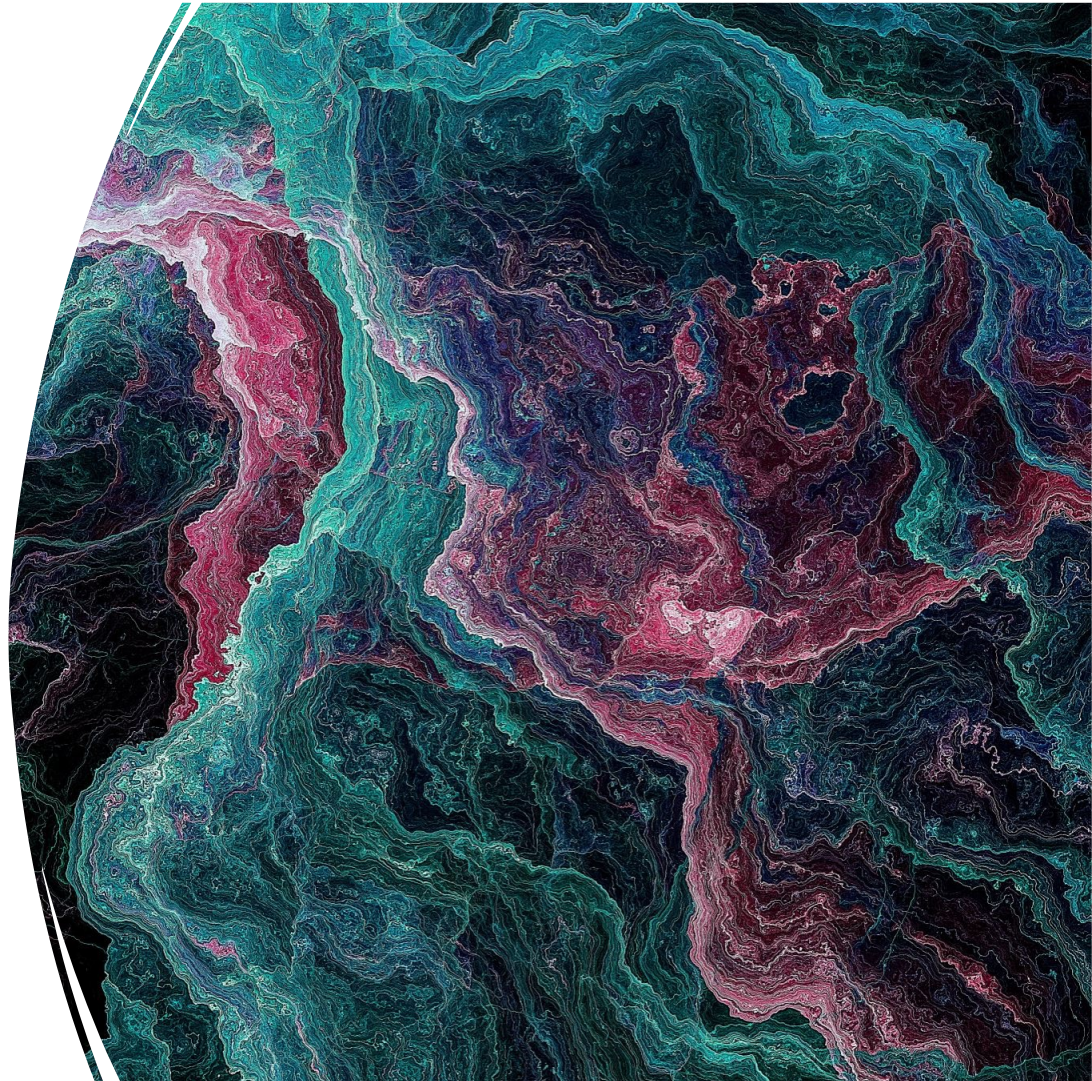
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More detailed explanation of the analysis in Ahmad, Kattumuri and Lee-Emery, Commonwealth Secretariat 2023



# Agenda for Fiscal Policy and Institutional Issues for resilience and sustainability

- **Perfect storm of shocks:**
  - Pandemic
  - Climate (or Pandemic in slow motion, no less deadly)
  - Conflict
  - Aftershocks with advanced country countercyclical policies: rising interest rates and possible banking contagion; reduced demand for EME exports; disruptions in global value chains
- **Essential to incorporate “uncertainty” into modeling and policy design**—will affect popular “market fundamentalist” prescriptions (Tanzi 2022 and forthcoming)
- 1. Resilience and sustainability requires a coordinated approach** applying consistent weights on natural, human and social capital, as well as spatial and interpersonal inequality for:
  - Investment design, as well as tax policies at different levels of government;
  - Market prices (for investments and tax design) with means-tested transfers for the poorest may make matters worse (Chile, Italy, UK)
- 2. Static income eligibility criteria need to be reconsidered:**
  - For concessional assistance to countries,
  - Numerical fiscal rules for regions or support to households should be replaced by linkage to subnational resource mobilization and ability to pay
- 3. Multilevel taxation, governance, and role of digital transformations** in changing both policy options and institutional arrangements

# Multilevel finance preconditions to address climate change risks

- **Addressing climate change and ensuring a just transition**
  - **National coordination, management and additional financing** needed, e.g., earmarked transfers or shared revenues
  - **But in all cases** increasing importance of local preventive actions, community/local-based support mechanisms, and
  - **Governance and information generation** and incentives facing officials at all levels
  - **Fiscal rules straight-jacket at sub-national level is problematic, especially with economic shocks,**
    - Can prevent desired structural change (clean cities) and addressing spatial imbalances (excellent World Bank India study)
  - **Importance of aligning both finance and incentives** facing sub-national entities to prevent debt spirals and poor investment choices
- **Spatial mechanisms of urban transition come into play,**
  - Generating clean employment “hubs” —spatial dynamics important, including cross-border issues
  - Link reforming metro areas, with new compact and connected cities in lagging regions
  - to address congestion and urban sprawl in metropolitan areas, with distributional and employment concerns in lagging regions
- **Local/subnational own-source revenues** to ensure local accountability and access to private finance (Ambrosanio and Bordignon, 2015 in Ahmad and Brosio, *Handbook of Multilevel Finance*)
- **Full information on transactions and buildup of liabilities;** GFSM2014-compatible balance sheets to prevent “game play” especially at subnational levels(Ahmad, Bordignon and Brosio, *Multilevel Finance and the Eurocrisis*, 2018),

# How to get it done? Fiscal and Governance agenda for member countries and IFI advice

- **Investment decisions should address natural, human, and social capital**
  - e.g., ***move beyond market-based connectivity infrastructure***, without concern for emissions, migration and employment, or subnational service delivery, generates urban sprawl, inequality and informality (South Asia and most African cases, but also Chile, Mexico, China, Italy)
- **National/general government domestic resource mobilization agenda** is key to ensure sustainable access to private finance for public infrastructure
  - Importance of a **national VAT, excises** for externalities and distribution, including carbon taxes
  - Subnational ***own-source revenues*** for accountability and aligning incentives, and access to credit
  - Satellite imagery and blockchain opportunities for local taxes suggest need for a **national revenue infrastructure**
  - But **timely information and flow of funds**, together with **rate setting at margin provide avenues for subnational autonomy and accountability**—major area of future policy development
- **Increasing importance of new digital economy** in streamlining multilevel governance, new institutional arrangements needed for revenues and treasury functions
- **Governance Issues:**
  - **Ensuring workable earmarked transfers for major disasters**
    - Design and implementation problems in unitary and federal states
    - Important in considering sources of international support
  - **Ensuring sustainable access to private finance, local government bonds, PPPs requires:**
    - Importance of multilevel governance for earmarked transfers and access to private financing, including PPPs: ***full information*** and balance sheets, GFSM 2014+

# Spatial dynamics of urban transformation for sustainable growth?

- **Reforming cities in light of the pandemic involves reversing migrant flows to major metropolitan areas, and building sustainable “employment hubs”**
- **Mitigation/adaptation in large metropolitan areas—**
  - innovative work patterns, within city transport, restructuring buildings and communal spaces,
  - Innovation zones linked to high-tech research labs and research centers, financing, support for startups and new value chains
  - preventive health clusters within metropolitan areas
  - **Exclusive focus on major metropolitan centers is self defeating—**Mexico City or Jakarta are literally sinking and cannot absorb more migrants; South Asian metropolises no less vulnerable
- **Regional/state and cross-border connectivity** necessary to reorient domestic and external value chains, but not sufficient for “leveling up”
- **Compact, clean and connected (CCC) cities** as “sustainable employment hubs”, to
  - absorb workers from restructuring metropolitan areas, and
  - Generating more labour-intensive activities

# Integration of multilevel taxes and investments with sustainable growth

## Coordinated Tax and Investment strategy:

- Appropriate weights for different capital and labour
- Income distribution and employment focus for investment and taxes
  - Environmental and pollution impact
- Appropriate cost of public funds choice of discount rate

Source: Ahmad, E. 2021, "Multilevel financing of sustainable infrastructure in China—Policy options for inclusive, resilient and green growth". *Journal of Infrastructure, Policy and Development*.

- Tax and spending assignments, and "package of measures"
- Public investment for sustainable employment
- Transparency and governance requirements
- Financial sustainability in medium-term

## Improvement of local public service delivery and infrastructure

- Accountability through local own-source revenues and equalization transfers
- Full information/balance sheets to access private capital/municipal bond issues/PPPs

## Sustainable urban employment hubs

- National investment requires local infrastructure and public services
- Own-source revenues for SDGs and access to borrowing
- Urban design and regulations matter
- Attracting private investment to ensure employment generation, and spatial dynamics of migrations

Coordination of policies across levels of governments and economic sectors

# Reconsider static per capita income related indicators

Eligibility for assistance and fiscal rules



# Arbitrary per capita cut-off points for Concessional Assistance

- **Catastrophic losses can occur at any level of per capita incomes**
  - Small island economies (e.g., in the Caribbean) increasingly vulnerable
    - Frequent hurricanes, seismic activities (e.g., Pacific rim), rising sea levels
    - Economic aftershocks affect income from exports and tourism
  - Conflict (e.g., Ukraine) and its ripple effects (e.g., access to food in Lebanon or Africa)
- **Lessons from HIPC programs targeting Low Income Countries**
  - Following Jeff Sachs's Critique that HIPC funds were not reaching the poor in poor countries, HIPC II allocated funds to municipalities, e.g., in Bolivia for health and education
    - But, in Bolivia, municipalities did not control "economic" inputs (hiring and wages of teachers/doctors, O&M, investments)
    - However, IFMISs designed and financed by IFIs could track neither "economic", nor functions (GFSM 2001/14), let alone these components financed by HIPC or external assistance
    - ***Important to incorporate multilevel responsibilities, and track flow of funds effectively***
- Reliance on ratings-like assessments, supplemented by hard to monitor or cost "outcomes", not sufficient

# Designing and implementing numerical fiscal rules under uncertainty

- **Both the pandemic and effects of climate change make it clear that “uncertainty”** has to be integrated into modeling and policy design
- **Genesis of numerical fiscal rules**, including at the subnational level, came about as a result of the Maastricht Treaty
  - The rules were a “political compromise”, based on a back of the envelope exercise, and the assumption that there is a steady state, and perturbations due to risks could be handled through waivers
  - But with uncertainty, there is no steady state
- Vito Tanzi in 1990s **commented “responsible countries do not need rules, and irresponsible ones will get around them”**
  - Argentina was in trouble well below the Maastricht levels, and Japan quite comfortable well above it
  - Germany and France breached the rules in the early 2000s,
  - Spain appeared to be well within the limits in 2008 but was not as subnational liabilities due to PPPs building up in the *cajas*, were not reported. It took the Global Financial Crisis, and banking collapse to discover the truth (with actual general government debt/GDP ratio well above 100%, rather than the reported 40%)
- Work now to revisit standard rules (e.g., Blanchard and Zettlemeyer; and EC underway)--**but stochastic modeling is very complex and requires a leap of faith, as historical data sets do not reflect uncertain futures**
  - **Tanzi KISS principle applies** (*keep it simple, stupid*).
- **Huge increase in public investment needed for adaptation and mitigation, but will likely be constrained by numerical fiscal rules at both national and subnational levels –but sustainability over the medium term is critical**

# Important takeaways from the World Bank India 2023 study of subnational fiscal rules

- **Fiscal rules work, but only too well** (Rangeet Ghosh and Tanvir Malik, 2023)
- **Restrict capital spending**, and
- **Disproportionately disadvantage poorer states**,
  - hence cementing tendencies for inequality, in the context of time-bound compensation for the GST reforms,
  - absence of adequate own-source revenue bases

An issue not raised in the presentation, but equally important:

- **Buildup of off-budget liabilities, and NPLs** in the banking system

Thus:

- Need to rethink options in light of shocks, both the Pandemic, as well as climate uncertainty

# Complications with earmarked transfers and spending mandates

- **Tied transfers reduce subnational accountability or choice but are clearly needed**, as seen during the COVID crisis or climate shocks
  - But reduce the ability of sub-national governments to meet debt liabilities and finance basic public services
- **Incentives for subnational governments (SNGs) to continue to incur off-budget debt with asymmetric information and incomplete balance sheets** (lack of GFSM2014 compatibility)
  - especially through special instruments and PPPs that are not so easy to monitor, significantly adding to overall risk
  - **Potential rise in NPLs of the banking system**, as seen in Spain and realized during the Global Financial Crisis (GFC) 2008-10; even though ostensibly met the Maastricht Treaty requirements to that point
  - France only started requiring SNGs to record PPP liabilities in their balance sheets following the GFC

# Multilevel taxation and digital transformations

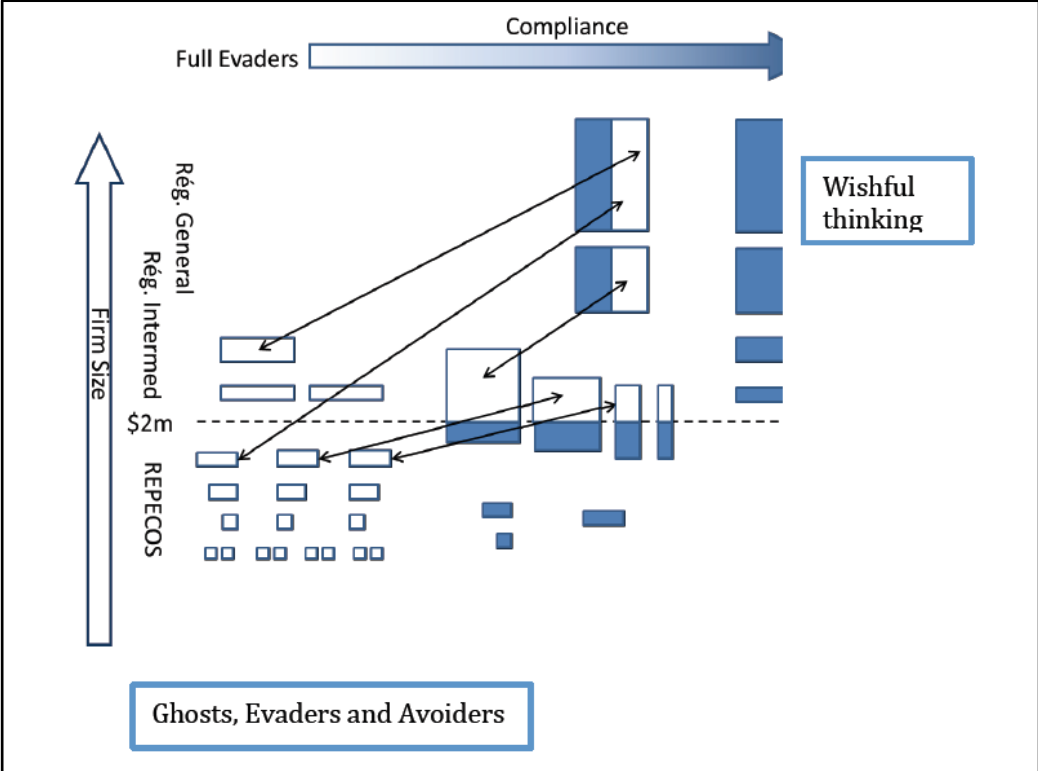
Many OECD policies and institutions not nearly as effective in EMEs—so transplant with care!

- **Transplanting Bismarkian social security financing through formal sector payroll taxes**
  - Encourages “informality” (Santiago Levy’s “Good intentions bad outcomes”)
- **Emphasis on Personal Income Tax (PIT) to fill “revenue gaps” and address inequality**
  - In most EMEs, PIT covers mainly formal sector wages, and raising rates is likely regressive, and does not generate revenues (e.g., Pakistan and Philippines)
  - Remember the work on stages of development and tax bases (Hinrichs, 1955); and IMF (Tanzi 1986)
- **Property taxes based on (US-style) valuation and ownership models for recurrent taxes of non-commercial property have not worked in EMEs**
  - Beyond difficulties with the cadaster and valuation mechanisms (also abandoned in the UK by Margaret Thatcher) political economy problem of potentially asset rich but income poor households
  - Alternative for EMEs: Marshallian beneficial linkage, based on occupancy—can be implemented quickly and also provide the basis for stable financing of SDGs, including providing services to the informal sector
- **Land-value capture: preconditions are significant**
  - Need Japanese style governance and accountability
  - In most EMEs, translates into “land grab”, increasing urban sprawl and informal slums in periphery (Karachi), with gated communities for “elites”, and off-budget “slush funds” in China

# National taxes: importance of the VAT and digital transformation

- **VAT designed** to (i) replace taxes that add to the cost of doing business, (ii) reduce production distortions; (iii) facilitate domestic trade and exports; and (iv) generate revenues; popularized by the IMF
  - Advantages vitiated with **split bases** (South Asia, Mexico), or **with exemptions** for investments or distributional considerations
  - **Segmentation encouraged to concentrate on large taxpayers** that do indeed generate much of the revenues, but this opens opportunities to cheat (including with SEZs)
- **Integration of bases facilitated by digital invoices** for small businesses and btb transactions
  - Require also a change in the legal framework away from “lumpsum” taxation of small firms to full operation of offsetting invoices
- **Huge advantage of full VAT integration: generation of information** for the full operation of the income taxes, and production sharing contracts
  - Mexican example—only country to take advantage of disruptions in global value chains, with the whole country now an effective Special Economic Zone
  - China, with full VAT integration of goods and services, borders around Shenzhen removed in 2018 to create, inter alia, the high-tech Greater Bay High Tech zone.
- But **political economy of VAT reform is complex**
  - Gainers and losers across states/provinces solely within the VAT cannot be handled without complexity
  - Thus, need a joint consideration of VAT and intergovernmental transfers (China 1993, Australia 2000s) or a set of taxes (Mexico 2013)
- **Need to provide an own-source tax handle to states/provinces** (e.g., piggyback on an integrated PIT, or carbon tax) to be able to access private finance, **together with fiscal equalization** (e.g., simplified Australian model)

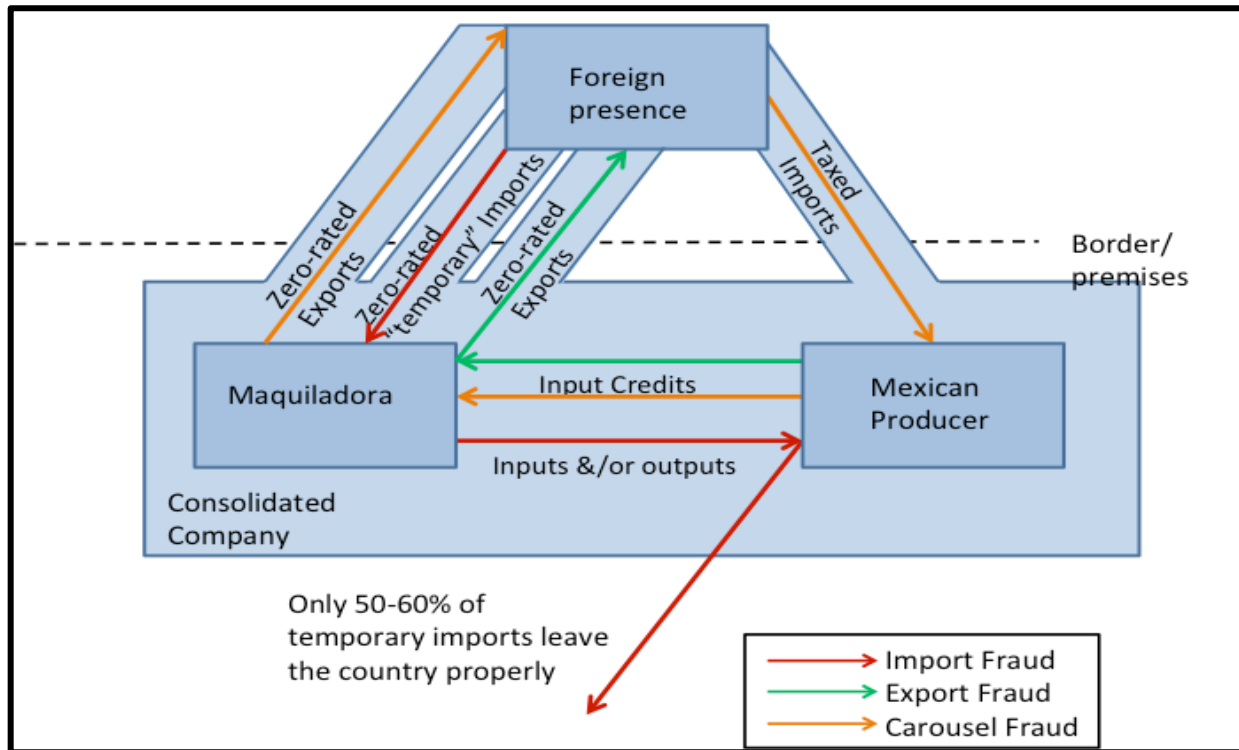
# VAT value chains and incentives to cheat in Mexico



Source: Ahmad, E., 2021, "National and subnational tax reform to address informality, in *The Global Informal Workforce: Priorities for Inclusive Growth*, IMF.



# SEZs: Maquiladora sink-holes



Source: Ahmad, E., in LSE Program on Sustainable Transitions in China and Mexico.

# Mexican 2013 Reforms to the VAT created a level playing field, subject to connectivity investments

- **Post-NAFTA creation of maquiladoras** (SEZs) had attracted investment, but resulted in low tax/GDP ratio (around 10%) with considerable rent-seeking
- **Focus on the full VAT base in 2013 to generate information on the value chain and reduce possibilities of rent-seeking,**
  - including better information for excises, payroll and the income taxes
  - **Exemptions maintained for non-processed foods and medicines** for distributional purposes, building on Seade, Coady et al 1998 (SHCP and World Bank), and Urzúa 2005, “Ahmad-Stern model revisited.”
- **2013 reforms also introduced a carbon tax, by setting a public price with a margin above world prices (eliminating an implicit subsidy, with no linkage with the “model” CCT)**
  - ***Ironically, direction of reform estimates indicate that attractiveness of carbon tax increases with an increase in the inequality aversion parameter***
- **Reforms raised the tax/GDP ratio by 4 percentage points to 14.5% within three years**
  - By blocking the ability to hide transactions with the SMEs **using digital e-invoicing**, much of the improved revenue performance was due to the ***better coverage of large taxpayers***
- **Created a level-playing field, with huge influx of FDI outside the formal SEZ (*maquiladora zone*)**
  - Does not matter whether the investment is outside the SEZ maquiladora zone, as long as immediate VAT refunds are provided on export
  - Encouraged the development of **domestic linkages in central states** with major employment implications
  - Facilitated the **restructuring of over-extended metro areas**, such as Mexico City to a more service orientation with manufacturing and employment moving to State of Mexico, Queretaro and other Central States
- **VAT reform hugely important in protecting Mexican economy during the pandemic and current turbulence, and Mexico is the only WHD country to have benefitted from the turbulence in global value chains**
  - ***While “tagged” carbon tax is important, tax-on-tax interactions show that non-tagged taxes such as the VAT might be equally or more important in ensuring resilience***

## 2013 fiscal reforms turned the whole of Mexico into a Free Trade Zone.... But huge spatial inequalities, with lagging Southern states



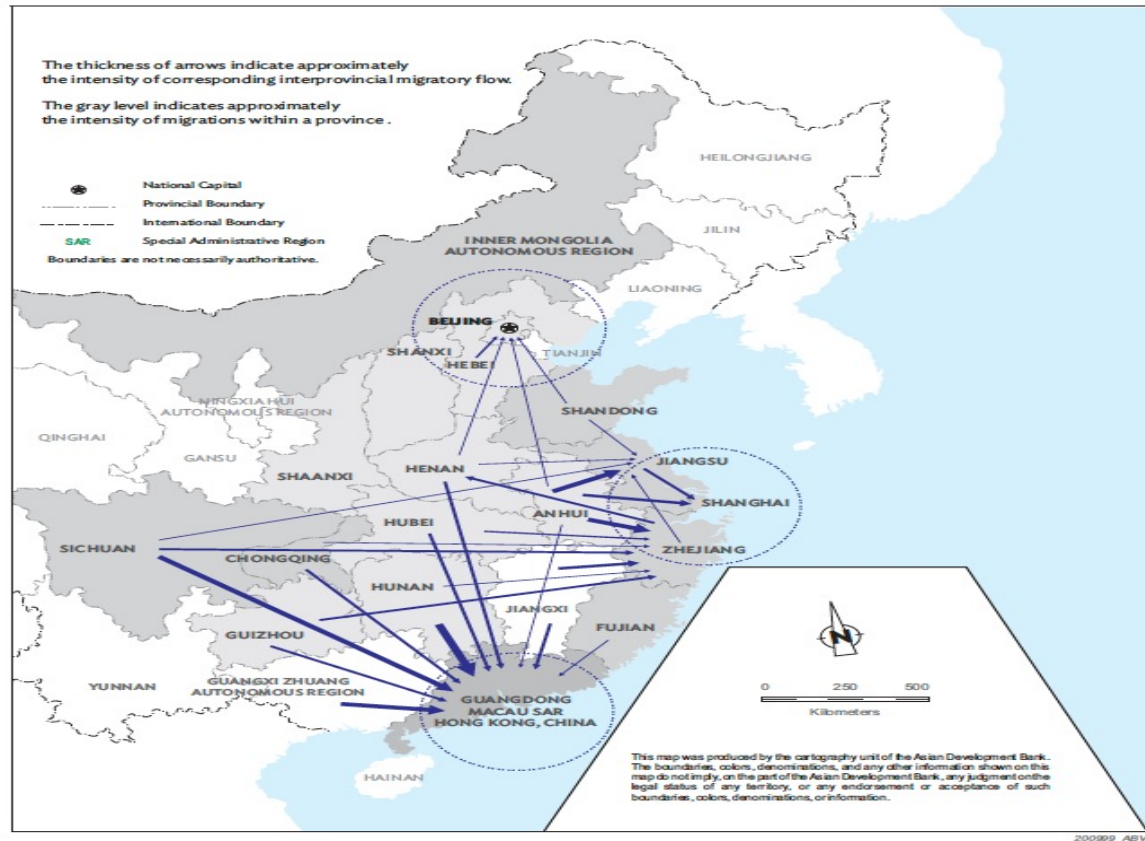
Source: Ahmad and Viscarra, in LSE Program on Sustainable Transitions in China and Mexico.

- Walmart CFO praised the small taxpayer e-invoicing system for integration of value-chains during Pandemic
- Major new investment by BMW for EVs (\$1 bn+) in San Luis Potosi
- Mexico is the only LAC country to have benefitted from "nearshoring" and value chain disruptions

# China: Problems of congestion along the coast, environmental degradation

See Ahmad , *Journal of Infrastructure, Policy and Development* 2021  
See also Ahmad and van Rijn, ADB WP).

- Despite the connectivity investments in the interior and the Western Development Strategy,
- people continued to migrate to where the jobs are and where expected incomes are higher-- Harris-Todaro still applies



Source: Xubei Luo and Nong Zhu, in LSE Program on Sustainable Transitions in China and Mexico.

# Subnational governance, tax and transfer design

# Managing assistance for shocks and transfers for national objectives

- **Spending from mandates and earmarked transfers, including for disasters**
  - Should not be subject to subnational fiscal rules
  - However, spending on these functions would need to be properly “ringfenced”, requiring GFSM2014+ in subnational Charts of accounts, to prevent leakages to unproductive spending
- **Investments for adaptation and mitigation generate externalities** and cannot be the sole responsibilities of the provinces/states/local governments
  - Needs to be clarity on what functions provinces/states and local governments will be held responsible for by national governments and their constituents,
  - ***So restraining state/local spending on SDGs or critical infrastructure would be counterproductive***
- Need for **full information on functions, and economic components** (wages, investment liabilities etc), including from the earmarked transfers/aid  
**(GFSM2014+)**

Full information on economic components of basic functions and outcomes is needed.....

Economic classification/ GFSM Functions/COFOG	Compensation	Use of goods and services	Fixed capital	... ....	Acquisition of non-financial assets	Admin/ Units Codes	Projects Codes	Programs/ Sub-programs Codes	Output	Outcomes
Education										
a. Primary and secondary	M	M	C/R	C	M/C/R	X	X	X	A	A
b. Tertiary	R/C	R/C	C/R	R/C	R/C	X	X	X	A	A
Health care										
a. Basic preventive	M	C	C/R	M	M/R/C	X	X	X	A	A
b. Hospital	R	R	C/R	R	R/C	X	X	X	A	A
Water	M	M	R/M	M	R/C/M	X	X	X	A	A
Sanitation	M	M	R/M	M	R/C/M	X	X	X	A	A

*Notes:*

'C' represents a central assignment, 'R' is regional and 'M' is municipal.

X would be relevant codes reflecting the institutional arrangements and A are actuals for outputs and outcomes respectively, that depend on sectoral analyses.

Source: E. Ahmad " Governance and Institutions", in E. Ahmad and G. Brosio (2015), *Handbook of Multilevel Finance*, Edward Elgar.

# Package of revenue measures for sub national “sustainability”

- **Creating sub-national “own-source” revenue handles does not require subnational tax administrations**

- State level “piggybacks” on integrated income tax base
- And piggyback/surcharge on national carbon taxes (e.g., to replace state GST on petroleum in India)
- A limited set of state excises on “bads” such as alcohol and tobacco, or piggy backs on national taxes
- Beneficial recurrent property taxes linked to SDGs together with using blockchain for property transactions and business properties—
  - may require within state/province “fiscal equalization”
  - See Ehtisham Ahmad and Giorgio Brosio, *Beneficial Property Taxation for Emerging Market Countries—addressing climate change and post-pandemic recovery*, Palgrave MacMillan 2022).



# How to protect subnational accountability and autonomy with changing digital institutions?

- **Satellite imagery and blockchain provide verified information to all levels of government instantaneously**
  - Greatly **simplifies the revenue/treasury circuits and administration**, especially where transactions feed different taxes (local property, as well as national capital gains and income taxes)
  - While blockchain permits local piloting, would **benefit from national coordination and financing**
- With national tax administration (also needed for a VAT), **subnational interests** can be protected by rate setting for assigned bases at the margin, and immediate and transparent flow of funds (to subnational TSAs)
- **Digitization requires coordinated national-subnational policies and institutional restructuring**, resulting in greater accountability and transparency
  - ***Ratings-like assessments** on a preconceived institutional structure, while a useful comparator, **can be a major impediment to digitalization** on both the revenue and treasury circuits*

# Conclusion: Sustainable access to finance at national and subnational levels

- Would then **be a function of strengthened national and subnational “own-source” revenues,**
  - Could be determined in a specific timeframe to permit strengthening of institutional arrangements
  - Crowding in access to private finance in a timely manner
- **Concessional emergency support should be a function of the severity of the loss, and not pre-disaster per capita incomes**
  - Will require **strengthened tracking of spending, including earmarks and special purpose transfers, and flows of cash** (i.e., local government balance sheets, GFSM2014+ and TSAs)
- ***Huge opportunities with digital transformations of institutional arrangements and policy frameworks***