WRI/LSE Project

Financing the Sustainable Urban Transition in China and Mexico

As part of the Global Agenda on Climate Change and Sustainable Development, the WRI/LSE project will examine the issues related to sustainable urban transitions in two systemically important countries—China and Mexico. Both are at crucial "turning points" and could significantly influence the policy choices in other countries, as well as being of great significance in themselves. The importance of a successful urban transition in anchoring sustainable employment generation takes on greater significance in the face of potential disruptions in cross-border trading linkages in both China and Mexico. This research program would closely liaise with work on Sustainable Development at the LSE under the coordination of Nicholas Stern, in collaboration with Amar Bhattacharya (Brookings).

The research agenda

The urban patterns in both China and Mexico have evolved as a result of new trading patterns. In China, the focus has been on the "coastal hubs" given the relative weakness in domestic connectivity, and very heavily influenced by the trade with the US. In Mexico, the maquiladora Special Economic Zone (SEZ) in the north, were designed to perform the same function, and while fairly important, have not quite had the same success in employment generation as the Chinese coastal hubs, possibly because of the ringfencing was accompanied by incentives to "cheat" in the SEZ. However, this has resulted in greater pressure on the Mexico City metropolitan area, and other major urban centers, with a buildup of informal settlements and urban sprawl, increasing inequality, congestion and pollution. In China, the coastal hubs have morphed into mega metropolises: Shanghai-Pudong, Shenzhen-Guangzhou, also resulting in considerable congestion and pollution, as well as very high spatial inequality.

The national tax agendas in China (1993/4 and 2015) and Mexico (2007 and 2013) have followed a similar trajectory and focused appropriately on fixing the main wide area tax instruments, the VAT and excises and the corporate income tax (see Ahmad, 2017)[1]. In Mexico, the carbon tax (petroleum excise) with a state level "piggy back" generates revenues and also incentives for the reduction of carbon use. However, in both countries, **the personal income tax and the related issues of sub-national taxation remain to be addressed, <u>together with the creation of clean and sustainable new "hubs" or city clusters</u>. These issues are also very closely linked to the possible disruptions to the traditional US-centric value chains** that have been important in both countries.

[1] Ahmad, E., 2017, *The Political Economy of Tax Reforms,* Intergovernmental Group of 24 countries (G24), Washington DC. Note that both China and Mexico are members of the G24.

The research methodology of the program will draw on several different strands of the literature:

- **An important starting point is the overall sustainable growth strategy and the role of spatial dynamics**, and particularly that of **city clusters** to become clean and compact employment generating hubs.
- **In macroeconomic terms, this involves in China, a rebalancing towards domestic consumption and linkages, and creation of internal hubs, and the management of overall risk and apportionment of liabilities.** As examples of the new literature on "geografiscal multi-level finance,"[2] this is linked to the new connectivity made possible by the Belt and Road program that effectively opens up the poorer Western and Southern Provinces. In the Mexican case, the focus is on new hubs to ease the congestion in Mexico City (e.g., Querétaro for a high-tech hub) and new trading hubs for development of new value chains (in the West for Asia, South for Latin America, and East for Europe and Africa).
- **The management and apportionment of risk especially at the subnational level, including liabilities associated with subnational debt and SOEs[3]** has been a major preoccupation of public policy management in Mexico since the 1990s, and in China is the cornerstone of the medium-term budget framework.[4]
- **The theory of reform** (Drèze and Stern, 1987,[5] Ahmad and Stern, 1991[6], Seade et al, 1987[7], guides both the selection of projects and clusters of projects, as well as the supporting tax systems, by jointly focusing on the effects on incentives facing investors and firms, households (and workers), income distribution and environmental impacts. More recent work has focused on the multilevel aspects, given that the focus is on new urban "hubs" or clean cities.
- **The financing of local infrastructure and public services linked to national and cross-border connectivity remains a critical focus.** As seen in Europe, and Latin America (e.g., Chile, but also Mexico itself), connectivity by itself does not guarantee convergence, and without the sustainable new hubs, may increase inequality.

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[2] Ahmad, Ehtisham and Giorgio Brosio (2015), eds., *Handbook of Multilevel Finance*, and the review chapter on Geografiscal Federalism by Revelli, and other chapters on spatial competition and Ahmad on the management of subnational liabilities.

[3] Liu Shangxi and Li Chengwei, 2018, "Public Services Evaluation from the Perspective of Public Risk Governance, in Ahmad, Niu and Xiao (2018).

[4] Liu He, 2018, "Three critical battles China is preparing to fight," World Economic Forum, Davos, January 24, 2018.

[5] Drèze, Jean and Nicholas Stern, 1987, "The Theory of Cost-Benefit Analysis," in A. Auerbach and M. Feldstein, *Handbook of Public Economics,* North Holland. For an application, see also Ahmad, E., and N. Stern, "Tax reform and shadow prices for Pakistan," ***Oxford Economic Papers*** 42, (1990), 135-159.

[6] Ahmad, Ehtisham and Nicholas Stern, 1991, *The Theory and Practice of Tax Reforms in Developing Countries,* Cambridge University Press.

[7] Seade, J., D. Coady and G. Flores, 1989, "Fiscal Distortions, shadow prices and social profitability in Mexico," Discussion Paper, Development Economics Research Program, University of Warwick and El Colegio de Mexico

Despite differences in constitutional arrangements between Mexico (Federal) and China (Unitary), and governance mechanisms—electoral or yardstick competition (Mexico) and administrative progression (China), there has been considerable exchange of ideas on national reforms across the two countries, including the focus on fixing the VAT and the national taxes and strengthening the national tax administration (SAT).

The current research program seeks to identify similarities and differences in the choice and sequencing of measures to finance the new urban transitions in China and Mexico. This should provide more robust recommendations on strategy and financing options in a range of emerging market and developing countries.

The country focus

The China program will build on significant work undertaken by LSE staff over the past couple of decades (see Ahmad, Neuweg and Stern, 2018,[8] and Ahmad, Niu and Xiao, 2018[9]), and a strategy paper being prepared to identify structural issues relating to the urban transition for a Conference on Strategic Directions of Chinese Reforms being organized by the LSE. This would also identify the policy options to be assessed during the empirical work to be undertaken in conjunction with WRI (China) and Tsinghua University, as well as colleagues at Sun Yat-Sen and Zhejiang Universities.

Several of the Chinese themes concerning the sustainable urban transition also are relevant for Mexico, including the better management of risks from disruptions of traditional trading patterns, improved environment and living conditions. However, with a new administration that will take office in December 2018, as agreed with WRI (Mexico) the main work on Mexico will take place sequentially during January-June 2019. Nonetheless, engagement with the transition team will begin around September as it becomes clear who the main counterparts will be. WRI (Mexico) also suggests a small workshop with potential collaborating institutions in Mexico around then to firm up the work plan and deliverables for the Mexico-specific program.

The juxtaposition of Mexico and China in a common research agenda on Sustainable Urban transitions will have implications far beyond the borders of each country. And more importantly, there are general lessons that are of wider significance in a broad range of countries including a strong urban restructuring to meet economic and trading shocks. We will draw on these lessons as part of the more general work on Sustainable Development.

[8] Ahmad, Ehtisham, Isabel Neuweg and Nicholas Stern, 2018, "China and the World Economy: Better Growth, Better Climate," China Development Forum 2018; and Grantham Research Institute Policy Paper.

[9] Ahmad, Ehtisham, Meili Niu and Kezhou Xiao, 2018, *Fiscal Underpinnings of Sustainable Development in China,* Springer.

I. Financing the Sustainable Urban Transition in China

The China WRI/LSE program on "Financing the Sustainable Urban Transition in China" will come at an opportune time to feed into policy proposals that could be incorporated into the Chinese 14th Five Year Plan, and also have a major impact on the Global Climate Change and Sustainable Development Agendas. The report will build on a paper being prepared by Ehtisham Ahmad to outline the main strategic directions for the urban transition. This will also address the structural change needed to deal with the risks associated with potential trade disruptions and discuss key parameters for the 14th Five Year Plan. These would be further developed with the empirical investigations being planned by LSE/WRI program together with Tsinghua University, and Ahmad's research collaborators in China at Zhejiang and Sun Yat-Sen Universities (see below).

Antecedents

The highly successful growth story in China over the past two decades has built on the ***strengthening of coastal "hubs" largely geared to export activities.*** This process has been facilitated by very large migrations from rural areas and interior cities to the coast (over 150 million people) over the past couple of decades with a phenomenal reduction in poverty (over 750 million people). This process has been facilitated by a strengthening of the common economic space with national tax reforms (principally the VAT) designed to ease the cost of doing business and the CIT that has converged to 25% that is now fairly common in the OECD.

As a consequence of the growth patterns, the coastal "hubs" have become **congested and polluted mega-cities**, generating a **high degree of spatial and interpersonal inequality**. The systemic tax reforms have led to an increasing centralization of the revenue structure and administration, with an increasing reliance of subnational governments on shared revenues and intergovernmental transfers to close vertical gaps. With one of the highest levels of decentralized/deconcentrated structures of spending responsibilities, and relative weak monitoring of spending and liabilities at the lower levels of administration, there has been a **spiraling of sub-national borrowing and liabilities**. While the aggregate debt levels for general government are well within prudential limits given the resources of the central government, a **telescoping downwards of deficits poses heightened risks** (Ahmad, Niu and Xiao, 2018[10]).

In addressing the main structural issues for the 14th Five Year Plan, the conceptual paper will build on **the three pillars of government economic policy enunciated in December 2017**, namely: (1) addressing ***risks and liabilities that*** have built up in local government finances and state owned enterprises; (2) elimination of poverty during 2018-2020, and addressing ***the prevention of poverty*** in the 14th Five Year Plan period, and the ***reduction in spatial and interpersonal inequality***; and (3) ensuring ***a cleaner environment and improved quality of life*** (see Liu He, 2018). The parameters for the medium-term budget framework (2018-2020) provide a starting point for the structural changes that will be incorporated in the 14th Five Year Plan with

[10] Ehtisham Ahmad, Meili Niu and Kehou Xiao, 2018, ***op cit.***

the objective of achieving a moderately prosperous standard of living, with a clean and fiscally sustainable pattern of development.

The key structural element of the reform strategy will have to be implemented by transforming the urban and city landscape in China. The city and subnational levels of government will have to take greater responsibility for the stated policy outcomes. Given the size and diversity of China, a number of institutional arrangements may be necessary to encompass:

- **new central city cluster arrangements** that will create linkages with the surrounding cities and rural areas to generate compact, clean and connected economic zones;
- the **shift to clean activities and services in the large metropolitan areas**, and Tier 1 Cities, such as Beijing, Shanghai and Guangzhou,
- the **generation of innovative high-tech hubs**, for instance the Silicon Valley underpinnings of the Greater Bay Area proposal and specialized high tech zones elsewhere; and
- the development of **new "hubs" in smaller Tier 2 cities. These include some in the Western region**, given the changing relative cost structures and value chains with the Belt and Road Initiative (BRI).

An sustainable urban transition will be particularly important to build on new value chains, given the potential disruption to global trading patterns—an issue of concern also in Mexico.

The agenda for financing the urban transition in China

There has been experimentation in China with many of the financing instruments identified in the previous work by NCE as being relevant for emerging market economies—namely municipal bonds, PPPs and land sales. Despite the clear potential of these instruments in easing local financing constraints, the rapid buildup of liabilities and risk with limited own-source revenues and weak recording of liabilities, especially at the sub-national levels, has led the Central Government to pull back on this set of instruments. Instead, the immediate focus is on strengthening the responsibilities and assignments, particularly the tax instruments, associated with cities, and the innovative new institutional arrangements described above.

Consequently, the work on **China will focus principally on subnational and local taxes and governance criteria (including the recording of liabilities in local balance sheets) as the preconditions for a fiscally sustainable utilization of alternative financing instruments**. These are the foundation for more accountable decision making at the city level, and also the key for more systematic access to the typical additional financing options without generating substantial additional risk of a subnational debt crisis.

The key issues to be addressed include the following:

1. Governance criteria and administrative and economic boundaries

- The new urban strategy is linked to the **focus on city clusters and "sustainable hubs."** Among the more interesting is the integration of the special economic zones (such as Shenzhen) into the rest of the economy, building on the spatial linkages with other cities, and particularly the high-tech corridors. Similarly, the Belt and Road Initiative opens up "spatial equalization" possibilities in the poorer Western and Southern provinces that were previously elusive.
- **The governance criteria for the new "economic clusters"** could involve new institutional arrangements redrawing administrative boundaries, or sub-provincial coordination mechanisms, needed to make the economic clusters work efficiently. This will affect responsibilities for local infrastructure and public services as well as financing arrangements.
- **Full information on liabilities generated and access to local own-source revenues** are preconditions for accountable access to borrowing and credit, as well as the operation of PPPs, that also generate public obligations in the future.
- An apportionment of the **sustainable overall resource envelope** over the medium-term and apportionment of debt limits across lower levels of government is critical for the new "hubs" without a buildup of risk. Key elements will be the determination of own-source tax handles for "responsible" levels of government that will be permitted access to capital markets to finance relevant local/city level infrastructure, and full information on the liabilities generated.

2. Disentangling responsibilities

- **Greater clarity on the functional responsibility of sub-national governments for spending assignments should provide a basis to delineate the new urban structures** (State Council Directive 6/2018). While work is needed to draw imply implications for cities, this should help reduce unfunded mandates and pressure of debt at the lower levels.

3. Subnational Tax Handles for structural change

Own-source revenues, or instruments over which a jurisdiction can exert control at the margin, are critical in determining the effectiveness of "responsible" subnational levels of government and determine the extent to which private resources can be leveraged without increasing risk. This does not imply that the administration has to be local (Ahmad, 2015[11]), and national tax reforms of policy and administration can provide for own-source revenues through piggy-backs or surcharges.

[11] Ehtisham Ahmad, 2015, "Governance and Institutions," in Ehtisham Ahmad and Giorgio Brosio (eds), ***Handbook of Multilevel Finance,*** Edward Elgar.

- **The national business tax for VAT reforms was needed to reduce the cost of doing business and create a full economic space**. This has implications for the cluster/high tech zones including the SEZs—permitting an integration of a silicon-valley type linkages and "cluster", e.g., in the Greater Bay Area.

"Piggy-back options" might be relevant for China on the following bases:

- The ***personal income tax***; and
- A ***carbon tax***. This would have to be carefully modeled keeping in mind the effects on different groups of households and potential compensatory mechanisms that might be needed.

The piggy-backs or surcharges could be useful in **achieving distributional and environmental objectives, besides providing own-source revenues that could open the way for access to bonds and PPPs without exacerbating local risks.**

As in most emerging market economies (and the UK), the US-style property tax (based on ownership and valuation) has not had much success in experimentation in China. We will explore **an alternative** (see Ahmad, Brosio and Pöschl, 2015;[12] and Ahmad 2017[13]) for **a simple banding arrangement on occupancy linked to local service delivery. The tax-benefit linkage** would lead to greater accountability for the clearer responsibilities envisaged under State Council Resolution 8/2018.

- **A new simplified property tax, based on occupancy, could provide a basis for accessing credit for financing local infrastructure—including bonds, as well as liabilities under PPPs,** without adding to the risk currently inherent in sub-national operations.
- **Vehicle taxes, user charges and regulatory mechanisms** provide typical local instrument, together with vehicle taxes, form the set of revenue related financing instruments that could lead to more sustainable cities.

4. Additional financing and risk-management mechanisms

The typical instruments used to involve **the private sector in managing and financing public infrastructure, including PPPs and local government Bonds, have had mixed success** in China, as the absence of own-source revenues has exacerbated the risks associated with these instruments. The use of these instruments by "responsible" tiers of government again depends on the availability of adequate "own-source" tax handles, as well as full information on the liabilities generated on the balance sheets of the respective jurisdictions.

[12] Ehtisham Ahmad, Giorgio Brosio and Caroline Pöschl, 2015, ""Local property taxes and benefits in developing countries—overcoming political resistance?" in E. Ahmad and G. Brosio (eds.), ***Handbook of Multilevel Finance, 2015.***

[13] Ehtisham Ahmad, 2017, "Rebalancing in China: fiscal policies for sustainable growth," ***Singapore Economic Review*** 2017.

Given the potential trade shock, counter cyclical policies may include ramping up local infrastructure spending by local governments financed by bond issuance. However, given the previous debt overhang from the counter cyclical policies in the 2008-10 period may exacerbate risks unless steps are taken to strengthen local governments' tax and governance preconditions for managing local debt.

The **balance between the efficiency and financing perspectives versus the prudential management of risks at each level of administration** needs to be carefully assessed as part of the urban transformation agenda. Although China has moved to the GFSM2014 standard, and also now requires accrual accounting, the development of balance sheets at the county/city level requires a great deal of work, even in the more advanced areas of the country. The clear delineation of risks and liabilities using full balance sheet data would be a precondition for the more efficient access to credit, including local bonds, as well as effective management of PPPs.

Many Chinese local governments have relied on land sales and combinations of PPPs to finance infrastructure, including in Shenzhen. The early success of this alternative to a local tax system together with access to credit, needs to be tempered with the potential downside relating to urban sprawl, loss of prime agricultural land, and off-budget accounts that might spawn rent-seeking behavior.

It will be important carefully delineate the scope of the land sale and value capture alternatives in the future—especially as the speculative motives in the interior may not be as strong as in the Tier 1 cities along the coast. Particularly important are new options for property taxation at the local level to put city-level finances on a more stable foundation. This will open up options for tax increment financing and betterment levies.

Case studies

The WRI (Tsinghua) teams propose to focus on:

- Wuhan
- Xian, and
- Shenzhen

The LSE teams will focus on the institutional arrangements underlying the Greater Bay Area proposal, by building on previous work on Guangdong, and given time will examine the following cities:

- On Guangzhou and potential linkages between the two hubs,
- Beijing Hadian, as an example of a high tech zone in an existing "hub"
- Jieshou in Anhui province, and Nanchang in Jiangsu province,

There is a possibility of including either Harbin (Heilongjian Province) or Changchun in Jilin Province to examine the issues associated with declining cities in the "rust belt" area.

The information needed on a standard basis include the following:

- Spending and Revenue assignments, as well as Financing Arrangements, with data on a GFSM 2014-consistent basis
- Spending
    - Main items of current spending (on own account) distinguished from that on behalf of higher levels
    - Main Main items of capital spending and investments (on own account) distinguished from that on behalf of higher levels
    - Off-budget spending
- Revenues
    - Sources of shared revenues
    - Identify items of own-source taxes or charges (where rates at the margin are determined by the local jurisdiction)
    - Land and asset sales
    - Special purpose transfers from higher levels
    - Equalization transfers
- Buildup of liabilities. Including through off budget operations and SOEs and PPPs
- Balance-sheet information on a GFSM 2014-compatible basis
- Financing items:
    - Bank borrowing
    - Issuance of local government bonds
    - Postponement of liabilities in SPVs
    - Arrears and discrepancies

On a thematic basis, we would like to explore the national and provincial experiences with

- New tax options, including potentially examining the scope for a simple property tax based on occupancy and linked to the cost of local services
- Cap and trade schemes
- Issuance of local government bonds, and the associated market valuations
- Overall debt positions in and within provinces at the various level (see Xiao 2018 for Guangdong)
- PPPs and associated liabilities
- NPLs of local banks?

II. Financing the sustainable urban transition in Mexico

The Mexico WRI/LSE program on "Financing the sustainable urban transition in Mexico" will be initiated during the first half of 2019 and is timely, given that a new Mexican administration takes office in December 2018. The program will develop suggestions that consolidate sustainable urban development and employment generation and build on parallel work on the design of clean, compact and connected cities. However, **it comes at a time of potential trade disruption with the problems faced by NAFTA, as well as financial stress that could result.**

At this stage, both the research agenda and potential collaborators in Mexico are tentative and will be finalized in consultation with WRI Mexico over the summer as the new administration takes shape following the decisive national and state level elections in July 2018, and a workshop in September with potential Mexican partners. The new Federal and State level administrations will take office in December 2018, and the empirical assessments will follow in 2019.

Background

As in China, Mexico's ability to address sustainable development issues, tackle corruption and informality, and weather trade shocks has been significantly strengthened by a set of far-reaching national tax reforms designed and approved in 2013, and implemented in 2014 onwards. These reforms have taken the tax/GDP ratio from under 11% to around 17% in a short period. The reform was predicated on blocking the holes in the VAT, that generated information used to reduce cheating in the income taxes. Another measure was a **carbon tax with a subnational component that could be a model for other countries, including China**. However, the incoming administration has been concerned about the distributional implications of taxing gasoline.

From a political economy perspective, in 2013 a **"package" of tax reforms was undertaken, designed to offset gainers and losers** to ensure passage through Congress whereas in the past, each of the component measures was defeated in isolation. In many respects, the logic underlying the 2013 Mexican national tax reform would be very useful model for emerging market countries.

As in China, the success of the **national tax reforms has not yet been followed by actions to strengthen intermediate (state) and local level revenue assignments**. This is partly due to the limited influence of the Federal Government on states that have their own constitutions, but also political economy disincentives associated with states being able to "negotiate" end of year ad hoc transfers from the Federal government to meet budget overruns. This was one of the contributing factors linked to the failure in 2010 to fully assign vehicle taxes to states—the *tenencía.* Further, the main tax handle at the state level to finance general expenditures is the payroll tax, or *nomína* at the state level. This "double taxation" compounds the taxation of the formal payroll, as well as the personal income tax (*ISR-persona, or IRS-p)* that largely falls on formal sector wage earners. The multiple taxation of wage income is a major factor generating "informality" with the associated inefficiencies and labor market distortions (see Santiago Levy, 2008[14]).

Key issues

Mexico's 2013 tax reform, by taking the overall tax/GDP ratio to 17%, made the public finances more secure and the country more able to withstand the trade and financial shocks that might arise from a disruption that would arise via a breakdown of NAFTA. Therefore, further fiscal strengthening, especially at the subnational and city levels, while reducing undue financial risk in choice of financing instruments, is going to be even more important than it has been since the tequila and subnational debt crises in the 1990s. **Both the environmental protection and employment generation possibilities need to be enhanced**.

1. Tax reforms to address climate change—carbon tax and gainers and losers, political economy of taxing vehicles

Mexico has been in the forefront of the global climate change agenda, and introduced a small **carbon tax, with a petroleum excise set at world prices) and a state level surcharge**, is in line with theory and best practice (see Ahmad and Stern, 2011[15]). This prevents a race to the bottom and local governments have an incentive to levy a surcharge or piggy back at the margin to also address congestion with a higher rate in some regions, to generate more revenues, and to use the own-tax component to anchor access to credit.

The longer-term political acceptability of a carbon tax in Mexico is not assured, and the gainers and losers must be examined. This goes **beyond using Conditional Cash Transfers for compensating the "losers"** with the full panoply of spending and tax instruments—including the **financing of job creation in the new urban clusters.**[16]

The interplay between taxes and transfers was seen clearly with the devolution of the vehicle tax in Mexico in 2010 and the rapid race to the bottom. Given the importance of the taxation of vehicles for the environmental health of cities, as well as addressing congestion and generation of a revenue base, we will further examine the interface of the tax with gap filling transfers and the political economy story, building on work done by WRI (Mexico).

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[14] Santiago Levy, 2008, ***Good Intentions, Bad Outcomes*,** Brookings Institution.

[15] Ahmad, Ehtisham and Nicholas Stern, 2011, "Effective Carbon Taxation and Public Policy Actions,", in M.G. Rao and Mihir Rakshit (ed), ***Public Economics: Essays in Honour of Amaresh Bagchi*,** Sage Press 2011.

[16] Note that the 1993/4 package of tax reforms in China was not accompanied by a direct compensatory mechanism—but the ensuing job creation, with freeing up the labour market, led to 150m people migrating to the new coastal hubs, including inter alia, Pudong and Shenzhen, with 750 million people taken out of poverty since the reforms.

2. Further tax reforms to reduce informality

Although considerable work has been done to track the full value chain with the reforms to the VAT in 2013, along with the integration of the small taxpayer regime (REPECOS) with the full tax system under the Federal SAT, more needs to be done to **leverage the full potential of the tax system to block the cheating and to use the tax on tax interactions to make the PIT work better to redistribute income effectively.** As in China, a broader base of the PIT with local/city level information, could make it more equitable and also provide an opportunity to **replace the state level *nomína* or payroll tax by a surcharge or piggy-back on the PIT**. This would:

- provide more revenues than the *nomína* to the states;
- reduce the incentive for "informality", and by providing local information for the PIT, enhance the overall equity and redistributive nature of the tax system;
- enhance the potential to create new "employment hubs" in the Southern, Eastern and Western regions of the country.

Initial revenue estimates will be provided, although the full growth impact will come through the investments and operations of the new hubs.

3. The property tax

Mexico has a **dysfunctional property tax that does not generate much revenues or provide a tax handle for cities to access credit.** Rates are legislated at the State level, and administration is largely local. The cities have very little incentives to use their administrative powers other than to bestow favors for political or other reasons.

With the way the property tax is structured, **there is very little scope for cities to impose betterment levies**—although Mexico City is an exception as it also has "state-level powers" like in the major city-province metropolitan areas in China. **Betterment levies on businesses** (on the UK model), might be an option given that a market for business properties exists, but would have to be carefully sequenced given the potential effects on firms of the likely disruptions in trading patterns.

We propose to build on options developed in 2013 for the preparatory work for the 2013 reforms(see Ahmad, Brosio and Pöschl 2015, *op cit*), which however did not address the subnational issues. **Fixing the property tax, including moving to a simple structure based on occupancy, will be central to the prospects for developing clean, compact and connected cities in Mexico, and in addressing informality.**

4. Additional financing mechanisms

The **prudential regulations for the issue local bond issues and access to bank credit are largely appropriate.** The main lacuna relate to (1) effective "own-source" revenues, and (2) poor recording of liabilities. Indeed, the buildup of liabilities in many subnational and city administrations is a matter of concern, some of the accounts payable that occasionally come to light. This has led to the “centralization” of some key functions, such as basic education, given deteriorating standards as measured by the Pisa rankings.

The limited take-up of PPPs is also understandable —given the need for liabilities to be linked to the standardized recording of information in state/city level balance sheets. In addition, the contracting arrangements are complex, and the standard approach of placing a TA office in the Federal Government might run the risk that the advice is linked to the liabilities being transferred to the Federation, as happened in the 1990s with the road building program.

5. Public spending and improved governance

Although the issue of redefining spending assignments is beyond the scope of the current study, **transparency in terms of what is spent, as well as information on outcomes and buildup of liabilities** are critical for the effective operations of sustainable cities, improved governance and prevention of corruption and rent-seeking behavior. Indeed, many of the additional financing instruments are not operable without the full information on standardized balance sheets. This is an important pre-condition for involving the private sector in many aspects of financing public activities, and is typically not given the importance it merits.

The issue of **local balance sheets, consistent with international standards (IMF’s GFSM2014, UN COFOG, and IPSAS requirements or PPPs must be taken into consideration** in evaluating the preconditions for many of the debt-related instruments that are implied with private financing of local infrastructure.

6. Design of new “hubs”

The **attractiveness of Special Economic Zones as the engine of growth has dimmed** as the Maquiladora region had become a vehicle for tax evasion and rent seeking. Further, the possibility of a disruption of trading links with the US, could affect the value chains that have been spawned by the Maquiladora zone.

The **new focus on Special Economic Zones (SEZs), with tax exemptions particularly for the VAT, has led to these zones being “ringfenced” and this limits the linkages** with the regions in which the SEZs are located. The removal of borders around Shenzhen has been made possible because of the integrated VAT, to develop linkages with the neighboring cities to become a true Silicon Valley corridor, and has lessons for Mexico.

As in China, **we propose to examine the spatial dynamics involved in sustainable hubs**, the needs for local public investment and resource endowments that could prove attractive for the private sector. In this regard, we propose to examine:

- A potential "hub" on the natural resource rich Eastern Coast, such as Carmen, affected by "Dutch disease" with limited employment potential and pockets of poverty;
- A southern "hub" in a poor region that might benefit from a redirection of trade from the North to Latin American countries and to Asia;
- The evolution of Querétaro as a central hub—a desirable small city with a strong university, on the main highway to Mexico City, a good airport, that has managed to attract the Latin American HQ's of Global firms.

The **choice of cities to study further will be taken in conjunction with WRI (Mexico),** in consultation with the incoming administration, likely in September.

III. Deliverables

In both China and Mexico **there is significant scope for developing fiscal and financial instruments in tandem to facilitate a sustainable urban transition** despite possible perturbations in existing trading patterns. Coordinated actions will be needed in national, state/provincial and city level institutions and policy instruments, and the pilots may help in identifying the alternatives that might be developed. Implementation typically takes much longer that the three-year horizon of the current program but may be feasible within the 14th Five Year Plan period in China, or the tenure of the incoming President in Mexico.

In a Federal state like Mexico, it is harder for the Federal/Central government to influence actions at the state and local level than in unitary states, like China, even if the lower levels of government are from the same party as the administration at the Federal level. Yet, **the research over a couple of years at the subnational level in both countries will help to identify the critical combination of instruments that are likely to be needed in each case.** This has a bearing on the potential deliverables for both China and Mexico, and an integrating paper drawing lessons of the work for emerging market and developing countries in general.

China

Main Deliverable: First draft by October 2019. Reviewed and edited draft by January 2020.

Overview of the options for urban transition in China, and the financing arrangements at the national and subnational levels*.* This will include an assessment of the institutional and multilevel tax, financing and governance arrangements, and the specific characteristics of each of the pilot city clusters and new high-tech zones based on a review of available data and existing literature.

Detailed assessments for each of the pilot cases will facilitate simulations of changing assignments, several of which have already been established by the State Council, and the need for additional reforms to the specific instruments identified.

Mexico

Main Deliverable: First draft by May 2020. Reviewed and edited draft by October 2020.

As in the China case, ***the first deliverable will focus on the interplay between national, State and local tax and financing instruments***. A key objective would be to examine the gainers and losers from the carbon tax and other environmental measures, to protect the advances made by the outgoing government in the past five years in relation to the climate change agenda, while focusing on the key strategic issues in new "hubs" or urban centers and with respect to sustainable employment generation and income distribution. Also, a detailed action plan with respect to the multilevel tax and financing instruments will be developed.

T*he case studies in Mexico would make the case for sustainable urban transitions for addressing spatial imbalances in Mexico, congestion and informality,* and the role that the financing and tax instruments will play in generating sustainable growth.

Cross-cutting analysis:

Final deliverable: Integrating Cross-country paper with wider implications.
First draft by November 2020. Reviewed and edited draft by March 2021.

The project will facilitate a comparative assessment of both the Chinese and Mexican case studies in deriving ***more general lessons for financing sustainable growth in emerging market and developing countries*** and the role of urban transitions in this regard.

In addition to these Coalition-branded products, LSE and partners will publish a series of working papers on specific themes and the case studies in each country. The longer-term objective will be to compile these in one or more volumes.