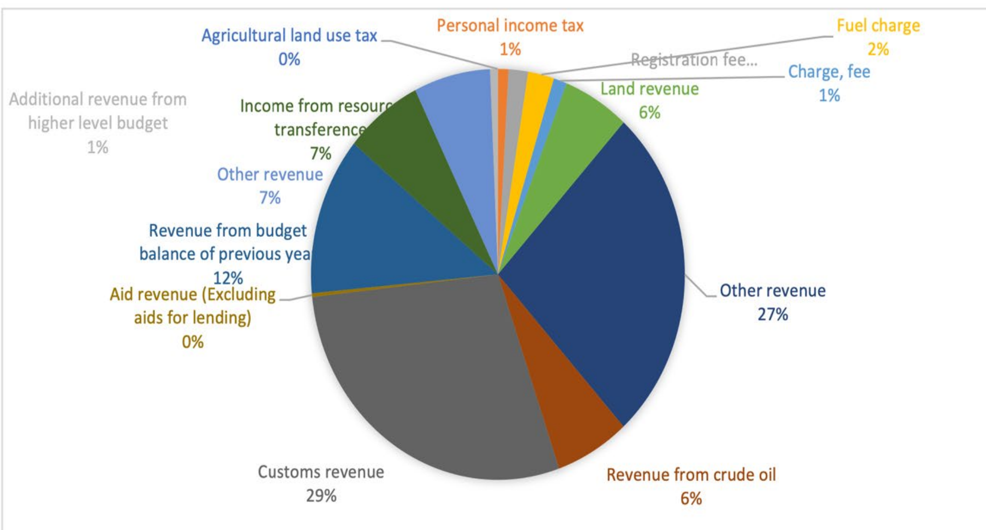
Policy goal: Climate adaptation through urban development

Concerns have been raised about the adequacy of public financing institutions in managing the expected damage from current climate scenarios. In this light, the engagement of the private sector and the use of more market-oriented instruments and taxation in financing climate change adaptation investments is suggested as increasingly essential (World Bank 2022).[4] Local governments are recognized as playing an increasing role in promoting infrastructure investments, in line with the government's decentralization policy.

Financing infrastructure and basic services sustainably and equitably is a significant challenge for HCMC. Currently, there are no specific revenue sources for urban infrastructure development. There is an agricultural land tax and a non-agricultural land use tax, but they are levied at a rate of only 0.03 percent of the land's official value and generate very little tax revenue. Vietnam has a public land price system, and the commune-based People's Committee reviews the land price every five years. The Land Use Fee, on the other hand, is a charge for the transfer of land use rights, which accounted for 8 percent of tax revenue in 2018. A significant portion of the local revenue comes from the registration of new and transferred properties. But the Land Governance ASA (2017-2019) laid out key options and recommendations on credible planning/zoning, enhanced lease revenues/value capture, improving commercial and residential titling and construction permits services, advancing a nascent dialogue on local property taxation, and improvements in the foreign and domestic investment prospects in HCMC (World Bank 2021)

Figure 3: Ho Chi Minh revenues (2018)



Source: Ho Chi Minh City Statistical Yearbook 2018.

[4] The global financial crisis of 2008 catalyzed a shift in Vietnam towards decentralizing infrastructure investment to the provincial level. Vietnam's adherence to a self-imposed public debt ceiling of 65% of GDP has further constrained its financial capabilities.

Optimizing municipal revenue: Property taxation and land value capture in Vietnam

The need to diversify sources of finance for climate investments, particularly increasing the role of the private sector, includes different strategies (JICA 2022; World Bank 2022):

- *Land use planning focused on climate adaptation:* Develop land-use plans based on climate adaptation principles. Implement zoning changes to encourage climate-resilient buildings and infrastructure.

- *Increasing user charges for infrastructure services:* With the growing affluence in cities, there is potential to raise more finance by increasing user charges for resilience services, aligning the cost of infrastructure more directly with its users.

- *Introduction of local taxes:* Implementing a single property tax could replace the numerous overlapping fees on real estate assets and transactions. This approach aims to streamline tax collection and potentially increase revenue.

- *Optimizing strategic land management (public land lease):* The government and publicly owned companies possess a significant amount of land. Various entities, including the national government, provinces, districts, local governments, and special purpose bodies, lease public land (*cho thuê đất công*) to generate revenue, provide land for real estate development, and encourage planned development and development with a public purpose.[5] The revenues generated from these leases are incorporated into the general budget of the leasing entities. In 2017, lease revenues amounted to 3 percent of Vietnam's GDP. However, corruption hampers the effectiveness of this instrument. In the past, the government often leased land to private developers in exchange for public infrastructure. However, the leased land did not necessarily have to relate to the public infrastructure provided by the developers. This lack of connection meant that developers had little incentive to provide the agreed-upon infrastructure on time and with high quality. Furthermore, the land valuation process lacks transparency. To combat corruption, the national government banned the practice of leasing public land in exchange for public infrastructure in 2020.

- *Land readjustment for climate resilient development:* Identify pilot areas for climate-focused land readjustment projects. Establish a task force to manage land readjustment projects with a focus on climate adaptation.

- *Land value capture for climate adaptation:* Consider introducing special fees or taxes to capture the value from land price increases resulting from climate adaptation developments. Establish a land price evaluation committee to assess improvements in land value due to climate adaptation measures (World Bank 2022). Planning authority and decision-making on land use and management lie with the districts and municipalities (OECD/UCLG, 2019). Local officials have significant discretion when issuing planning permits. Public investments in infrastructure and adaptation can significantly augment land values. These increments, often termed "unearned," may be indirectly captured and

[5] Subnational governments may require approval from higher levels.

transformed into public revenues through various fiscal instruments, including taxes, fees, and exactions. Alternatively, they can be directly harnessed through on-site developments that provide wider community benefits.

Methods of land-based finance (LBF)

Vietnam's current municipal revenue sources, primarily based on fees and a property tax derived from agricultural and non-agricultural land, fail to effectively capture the true value of urban land.[6] The reliance on rice productivity as a tax basis proves inadequate in urban settings, where land value is more closely tied to residential and commercial real estate markets and appreciates faster (Bahl and Martinez-Vazquez 2007). Some standard methods of LBF can be as follows:

- Reinforcement of land tax or property tax introduction
- Fee charged for land value improvements (betterment levies) to a specific area (all of those areas reached by the benefits of adaptation investments)
- Auction of building density bonus (to finance adaptation investments)
- Land readjustment
- Sales of development rights (that can finance adaptation)
- Joint ventures with private developers or private firms

a. <u>Property taxation</u>

Vietnam stands at a critical juncture in its fight against climate change, and the introduction of a property tax system could be the key to unlocking the necessary funds for adaptation investments. Despite the well-established nature of property taxes worldwide, Vietnam has yet to implement such a system, relying instead on a minor tax on land, as mentioned above. However, the government has recognized the need to align with international standards and is considering the introduction of a property tax, which represents a promising start.[7]

The utilization of property taxes for funding adaptation investments in Vietnam offers a practical solution that aligns economic development with climate resilience objectives. By focusing on urban areas, where infrastructure investment and economic development are higher, the government can ensure that those who benefit from improved infrastructure contribute to its financing. This targeted approach, similar to Japan's city planning tax (JICA 2022), promotes responsible urban development and enhances the capacity of local governments to manage adaptation projects efficiently and transparently.

The benefits of property taxation for adaptation investments are manifold. Firstly, it provides a direct source of revenue for local governments, which can be specifically earmarked for climate change adaptation investments. Secondly, the visibility and political sensitivity of property taxes

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[6] This discrepancy became particularly evident during 2007 and 2008 when real estate prices surged while rice prices remained comparatively stable. The application of an agricultural land tax methodology to urban or commercial land is thus incongruous and fails to capture the growth in residential and commercial real estate values.

[7] The Prime Minister's Decision No. 2174 / QD-TTg in 2018 marked a significant step towards this goal, instructing the National Assembly to study the establishment of a property tax.

can lead to more accountable and efficient local governance, ensuring that funds are used effectively for their intended purpose. Thirdly, as a form of wealth tax, property taxes ensure an equitable distribution of the financial burden, primarily targeting property owners who are likely to benefit the most from enhanced urban resilience. Finally, by taxing properties based on their value, property taxes can indirectly promote more sustainable urban development patterns, incentivizing development in less flood-prone areas or areas with better infrastructure to withstand climate impacts.

However, implementing a property tax system for adaptation investments is not without its challenges. It necessitates a sophisticated administrative system, including accurate land valuation and equitable tax assessment methods. Special attention must be paid to addressing potential disparities, ensuring that the tax system does not disproportionately impact lower-income or rural populations.

The government's proposal for a land-based tax is a positive and important step in developing a sustainable revenue source for city and local governments. The government's rationale for adopting a land value system includes several considerations. Firstly, taxing improvements lacked political support due to the economy's fragility and potential adverse effects on certain taxpayer groups. Secondly, real estate speculation in Vietnam is more influenced by escalating land values than by the value of improvements. Thirdly, technical and administrative systems are not sufficiently developed to implement a tax on improvements. Lastly, the approach of taxing improvements could have disproportionate impacts on specific segments of the taxpayer population. This form of taxation capitalizes on the principle that government-led infrastructure developments frequently elevate property values. Hence, imposing a tax on these enhanced values represents a strategic approach to reclaiming a portion of the wealth generated by public sector investments in infrastructure.

Beyond property taxes, there is potential for increased cost recovery for municipal services, such as stormwater management, to align costs with users and encourage responsible usage. Municipal governments also raise revenue through deals with private property developers, particularly through the sale of land use rights. However, these deals often lack standardization and transparency, highlighting the need for improved procedures.

b. Land value capture instruments:

The country currently has a very limited application of land value capture (LVC) instruments. The primary method used by the government is public land leasing, but this process is often hindered by corruption (OECD-LILP 2022). Several challenges impede the effective implementation of LVC in the country (OECD-LILP 2022), some of them are similar to improvements in taxation, explained above:

1. Lack of transparency in public actions and high land values incentivize government officials to use LVC for personal gain rather than public benefit.
2. There is an absence of clear legislation and regulations governing LVC and development norms.

3. Many urban areas have outdated, inaccurate, or incomplete cadasters, which hinders the effective application of LVC.
4. The government lacks an established method for land valuation, relying on a combination of prices set by government agencies and some market-based estimations.
5. Local governments often lack the necessary administrative capacity to implement LVC effectively.

Betterment contributions and impact fees: Innovative financing tools for climate adaptation

As Vietnam grapples with the urgent need to finance climate adaptation investments, the introduction of betterment contributions and impact fees may emerge as a promising solution. While property taxes offer a universally applicable approach, their implementation relies on a lengthy central government decision-making process. Betterment contributions, also known as special assessments, are targeted fiscal tools that levy charges on property owners in specific areas benefiting from public projects like stormwater or resilience infrastructure. Similarly, impact fees are imposed on developers for new projects, often as substantial lump sum payments. These mechanisms differ from broader property taxes by their focused application on beneficiaries of specific urban infrastructure developments, making them direct forms of value capture. The approach offers a potential pathway for cities to independently generate revenue for public infrastructure and services, including climate adaptation investments, at a more manageable scale, without relying on lengthy central government decision-making processes. While betterment charges are generally spread over a longer duration at lower rates, impact fees are typically one-time, substantial payments. In other words, these are considered the most direct form of value capture.[8]

Business and adaptation investments

Betterment levies can be implemented within special assessment districts, calculating charges based on increased land values due to public infrastructure improvements. In the US, local governments also often issue bonds to fund these developments, recouping the cost through betterment charges. The research by Leitold et al. (2020) and Revilla Diez et al. (2023) highlight the critical role of businesses and micro-business firms in flood adaptation strategies in HCMC, emphasizing their local embeddedness and vulnerability to flooding. These firms, especially in wholesale, retail, and manufacturing sectors, are disproportionately affected by floods due to infrastructural limitations and supply chain disruptions, even affecting their insertion in global export markets. Leitold et al. (2020) investigate these businesses' willingness to engage in flood adaptation, revealing a strong potential for their involvement in shared-cost adaptation initiatives, particularly when costs are distributed among local businesses and authorities. The study suggests that financing adaptation based on local business associations could significantly improve participation and revenue collection for adaptation efforts.

Additional building rights

For developers, the opportunity to access additional FAR is an asset, allowing developers to improve the profitability of their projects, especially in urban settings where land prices are high.

[8] Often these levies are imposed on top of property taxes which are applied to city-wide property owners.

The instrument has been analyzed recently in Vietnam, in relation to new transportation investments and funding sourced through land-based instruments. The reforms come at a time when city governments are increasingly aware of sophisticated land uses, to make room for more development, like increases in density or including the utilization of underground space, due to the growing limitations of urban areas (JICA 2022).

Moreover, utilizing the method of auctioning this additional FAR serves as an innovative tool, offering a mechanism to finance climate adaptation investments. An illustrative example of this approach can be seen in São Paulo, Brazil, where auctions of building rights have been successfully implemented (Smolka 2013). This revenue can support initiatives such as improving urban resilience to climate impacts, developing sustainable infrastructure, and enhancing green spaces.[9]

The land readjustment scheme

The land readjustment scheme, a notable land assembly method pioneered in Japan, represents a collaborative development approach involving landowner cooperation. In this scheme, each landowner maintains their land rights within the development area but agrees to a reduction in their land size to expand roads and secure reserved land for public use (JICA 2022). The costs of the project are offset by profits generated from the sale of this reserved land. This method has been extensively implemented, with over 12,000 projects covering approximately 370,000 hectares, contributing significantly to urban development and redevelopment. Remarkably, 30 percent of Japan's Densely Inhabited Districts (DID) have been developed using this scheme. In terms of LVC, the land readjustment scheme stands out for not directly recuperating development profits for the government. Instead, it achieves considerable public savings in district development costs through its innovative approach. Landowners benefit from the same or increased property values due to district-wide improvements, despite a reduction in their landholdings. This approach results in a reduction in financial income for landowners but concurrently lessens the burden of public expenditure, exemplifying a balanced and cooperative model for urban development and infrastructure improvement.

Conclusion

The case study of HCMC provides valuable insights into the complex interplay between climate change, flood risks, and land markets. As a rapidly urbanizing megacity in a low-elevation coastal zone, HCMC faces significant vulnerability to climate-related challenges such as flooding, sea level rise, and heavy rainfall. These risks not only pose a threat to the city's inhabitants but also have far-reaching economic consequences, particularly for the manufacturing sector and SMEs that form the backbone of the city's economy.

[9] By effectively leveraging additional FAR through auctions, cities like São Paulo, Brazil since 1995, demonstrate a model for financing crucial adaptation investments in urban settings (Smolka 2013). This city has been thriving in creating substantial revenue by issuing bonds, CEPACS (Certificates of Additional Development Potential), sold by electronic auction in the São Paulo Stock Exchange Market, used to acquire additional building rights combined with changes in land uses.