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The 2008 financial and economic crises that began in the United States ultimately reached urban governments around the world, affecting their investment financing systems. Credit systems have been devastated. Policies must be restructured; financing tools and mechanisms reinvented. The extent of damage varies from region to region, but it is clear that post-crisis recovery will take time, especially in the least developed countries. Consequently, rethinking urban financing systems, as well as urban planning and housing policies, takes on new urgency.

Local governments – municipalities, regions and others – affected by the crises face various constraints whose effects are cumulative, rendering recovery impossible in some cases. Broadly speaking, localities suffer the crises’ consequences at four levels: (1) receipts (income) can be drastically reduced, whether these are state transfers or a local government’s own taxes and fees; (2) expenses increase because of a decline in economic activity and corresponding rise in unemployment and social benefits; (3) ability to finance is reduced because borrowing becomes more difficult, and interest costs rise; (4) external investments are reduced, current operations often halted, and projects cancelled or delayed.

Local governments’ two main financing systems – municipal bond issues and commercial banks or specialty municipal lenders – have been hit hard by the financial crisis. Central governments have taken steps to address the crisis, which vary according to political and institutional circumstances. Nevertheless, the steps taken – rescuing financial institutions, stimulus and recovery plans – share a common trait: they target the national level more than that of local governments. Their concrete effects on cities are likely to be limited or delayed, as in the case of investment programmes that require time for implementation. In any case, beyond short-term actions, local governments require fundamental reforms to reverse their plight. In many countries, the relationship between local governments and the state is at issue, whilst the architecture of credit and financing systems has weakened everywhere. The crisis did have the effect of finally calling into question a paradigm that has ruled the financial sector for decades: the modernization of credit systems could
be achieved only through structured finance, the bond market and public-private partnerships. This discourse is no longer credible. But it would be wrong to conclude that these techniques and tools are outmoded. In this chapter, we will see that they remain at the heart of solutions designed here and there to revive the production mechanisms of sustainable cities.

WESTERN HOUSING AND URBAN DEVELOPMENT POLICIES ARE IN CRISIS

The mechanisms – in particular, securitization – through which the housing sector in the United States damaged the global financial system are well documented. However, the role of public housing policy appears relatively underestimated – a vital point in understanding the process and its origins. Historically, the US Department of Housing and Urban Development (HUD) – charged with promoting middle-class homeownership, supporting community development and increasing access to affordable housing – relies on two giant mortgage lenders: the Federal National Mortgage Association, nicknamed Fannie Mae, and the Federal Home Mortgage Corporation or Freddie Mac, both government-sponsored enterprises (GSE). The Federal Housing Authority (FHA) provides mortgage insurance for poorer people, requiring very small or no cash down payments to close a loan. In the mid-1990s, as government policy favoured housing construction and access to homeownership for poor people, HUD directed Fannie Mae and Freddie Mac to grant mortgages to low-income people without going through the FHA, and gradually increased their loan disbursement objectives. To achieve these government-mandated objectives, Fannie and Freddie put ambitious and evocatively named programmes in place – “American Dream Commitment” and “Catch the Dream” respectively – conceived to help the poorest households acquire a home. Eventually, private banks entered the market and subcontracted mortgage sales to independent agents, some of whom were unscrupulous (Kelly 2009). New mortgage products provided the basis for the GSE programmes: low- or no-down payment loans, thirty-year mortgages, low initial interest rates (known as 2/28, 3/27, etc.) or even interest-only “negative amortization” loans, with monthly payments of less than the full interest due – deferred interest being added to principal at the end of the loan’s term.

The mortgage credit system’s architecture rested on a borrower’s ability to refinance his or her mortgage. One method entailed “cashing out” an existing mortgage with a higher-value loan after a few years. Another relied on home equity lines of credit, where an increase in home value (over the value of the initial loan) served as collateral for another loan to pay off interest due on the first. These two mechanisms acted as rechargeable mortgages that worked well as long as home prices increased, even as they helped feed rising prices and a housing bubble. Tax-deductible mortgage interest and other advantages for cash-out loans spurred borrowers to refinance systematically and on a grand scale. It became prevalent for borrowers to buy larger houses than needed, and to use interest-tax-deductible home equity lines of credit to pay for consumer goods and everyday needs (Wallison 2009). When the real estate
market bubble burst and prices began to decline, it took down solvent or qualified borrowers – who appeared to be the primary victims in the end – along with poorer households, artificially solvent borrowers and speculators riding the bull market. Even after having made regular initial payments and taking out mortgages suited to their financial situation, solvent borrowers could find themselves in a negative equity situation: just as with the other borrowers, the value of their mortgage exceeded the value of their house. In September 2009, nearly 12 million households were thus “underwater” on their loans, owing more than their houses were worth. In most states, tax and other laws mean that owners in a negative equity situation can best retrench by ceasing mortgage payments (Wallison 2009). The bank forecloses and takes over the house, feeding the snowball of ever-lower house prices. Some owners not in a negative equity situation choose to keep their houses whilst waiting for a hypothetical or progressive price increase. During this time they lose their ability to move – apparently worsening the employment situation in some parts of the country where there is a correlation between homeownership and unemployment rates.

Spain is currently experiencing one of the deepest recessions in Europe. Its economic expansion of 1997-2006 ended abruptly with the bursting of the housing bubble that fed it and raised all indexes. The mechanisms behind Spain’s bubble depended, in part, on those operating in the United States, and on the specifics of Spain’s socio-economic and institutional circumstances, as well as its housing policy. The expansionary period started with strong demand for housing because of population growth and decreasing average household sizes. At the time, the demand was directed solely toward home purchases because of historical arrangements that penalized renting. Tax policy strictly favoured homeownership whilst the legal framework discouraged construction of private rental properties. This obligated young households and the poorest people to purchase housing at all costs. In ten years, the number of dwellings per person doubled in Spain: with 568 dwellings per thousand inhabitants, it now has the highest rate in Europe (Vorms 2009). Banks met this growth with increasingly attractive financial products for homebuyers exposed to ever-increasing prices. Forty- or fifty-year mortgage loans with low or even optional down payments also encouraged the construction of second homes, as well as speculative investments in general. At the end of the expansionary cycle, real estate prices increased more than 17% per year (Vorms 2009).

The bursting of the housing bubble precipitated bankruptcies for many real estate developers and builders, which aggravated the effects of the worldwide recession in Spain. It also plunged local governments into serious difficulty, given their dependence on receipts from construction activities, permits and increases in land values. These knock-on effects, coupled with a near-absence of rules and urban planning regulations in the autonomous regions charged with managing development, precipitated the final bursting of Spain’s bubble. The counties had been pushed to create
construction works to increase current revenues. The movement strengthened because each private development had to give part of the built land to the municipality for public purposes. In practice, it appears that many local governments resold these properties and used the revenue for current expenses (Vorms 2009). These elements contributed to the housing bubble by accelerating the production of buildings and property. They brought about a predatory urbanization, a chaotic process that consumed much open land.

These examples from the United States and Spain demonstrate certain fundamental principles. One is that financial engineering has no miracle recipe for overcoming a borrower’s insolvency. A policy of homeownership for all cannot sustainably function without individualized social assistance to insure and assist homebuyers. In addition, requiring private-sector or quasi-public financial institutions carry the costs of financing such programmes, without cost to the government, is not viable in the long term. Moreover, a housing policy based exclusively on homeownership for all seems based more on cultural schemes than rational economics. There is no correlation between a high percentage of homeowners and the wealth of a country or its people. This is demonstrated by several European countries with low homeownership rates, such as Sweden, Germany, Switzerland, the Netherlands, which figure amongst the richest in the world while having some of the lowest levels of poverty and exclusion.

**THE CRISSES’ EFFECTS ON LOCAL GOVERNMENTS**

The impacts of the financial and then the economic crises varied greatly from country to country. Institutional circumstances sheltered some local governments, relatively speaking, compared to others that were fully exposed. Local governments able to invest in the markets faced direct capital losses. In the United States, cities that made the most prudent investments lost 20%-25% of their money, while others that had invested in hedge funds lost much more. In the United Kingdom, local governments lost a billion Euros in the Icelandic banking crisis, not counting the value of lost future earnings. Elsewhere, debt denominated in foreign currencies or with variable interest rates ravaged municipal budgets, notably in several Eastern European countries.

Local governments everywhere have suffered from a decrease in tax revenues related to real estate, construction and development. In the United States, property taxes provide urban municipalities their primary source of revenue; some have registered a drop in receipts of more than 45% compared to previous years. Cities are not the only governments affected: the states also have massive budget problems. The majority of states’ budgets will be out of balance for the next two years, leading to a deficit of more than $350 million (McNichols and Lav 2009). In general, the decline in global economic activity equally affects local budgets in developing as well as developed countries, particularly in devastated regions such as Detroit area, the heart of the American automobile industry. Finally, many local budgets suffer from a reduction or delay in transfers from national governments, who also have constrained budgets. Such is the case in some Eastern European countries and some
less-developed ones, whose revenues drop with declining commodity exports and lower remittances from expatriates, and where local governments dispose of fewer of their own resources.

In some cases, increased expenses arise from smaller state subsidies for public services, pushing irreducible costs onto local budgets. In the most developed countries and those hit hardest by the crises, local governments experience increased social welfare expenditures due to increases in unemployment, in the number of families losing their homes, and in the homeless population. Even in countries with less-generous social services, such as emerging ones, local governments see their expenses mount. Pinched by decreasing receipts and increasing expenses – particularly for social benefits – local governments must drastically reduce their operating expenses. Under legal obligation to balance their budgets, many American cities have had to close their most expensive services for several days each month by putting staff on furlough. In many cases, particularly in developing countries, reduced operating budgets affect public services such as sanitation, garbage collection and waste treatment.

The degradation of municipal accounts is often one factor limiting their access to loans. The lack of liquidity in the financial system, the precarious situation of many banks and financial services institutions, the general lack of appetite for investment and the increase in interest rates are other parameters of a phenomenon that unequally affects local governments, depending on their credit culture and local financial system’s structure. Obviously, in some emerging countries, such as China or Vietnam where local governments cannot borrow money directly, or in the least developed countries that have never had access to loans (still the case in the majority of sub-Saharan African countries), the crisis has caused less disruption. Countries with specialized para-public financial institutions might limit or simply not impose credit restrictions in some cases, e.g. if the national government has used such institutions to revive the local economy. Nonetheless, in the majority of developed countries, difficulty in obtaining loans constitutes a supplementary or even determinant element in local governments’ financial problems. In a few countries such as Hungary, where local governments may borrow to cover current expenses, increased borrowing costs burden already-strained budgets. For the great majority of local governments, borrowing may be done only for investment purposes, and such restrictions lead to the reduction, delay or cancelling of transactions, which depresses the local economy and employment still further. An increase in borrowing costs also means the municipality will have supplemental expenses in the future.

Direct capital investments in urban development, office buildings and other facilities have been withdrawn everywhere. Public-private partnership activities have fallen off considerably. Many projects have been delayed or suspended, if not cancelled outright. Certain sectors are less affected, such as energy and telecommunications.
where demand remains strong. The sectors most affected are those most commonly related to local governments, such as water, sanitation and transportation, which have fallen 40%-50% in terms of project value (Leigland and Russell 2009). Developing countries are proportionally more affected by this decrease in activity.

BADLY DAMAGED CREDIT SYSTEMS AND INSTRUMENTS
The usually thriving tax-advantaged municipal bond market – representing $2.5 trillion in outstanding issues and new annual issues of nearly $200 billion – has severely contracted in the United States. Since bonds furnish almost their only means of financing, local governments now find it very difficult to raise money. They must cut back investment programmes to make up for higher bond interest rates. They must abandon projects usually easy to finance via revenue bonds because they generate their own income. The increase in financing costs strikes even harder as it follows prosperous times when local governments could easily raise money from bonds with historically low yields. Today, local governments with poor or average credit ratings are excluded de facto from borrowing. They no longer benefit from credit enhancement services that guarantee their debt, because credit enhancement companies (also called bond insurers or “monolines”) are also failing. The bond insurers’ role is to reassure the lender or investor that it will be compensated if the borrower defaults. These bond insurers, along with the credit rating agencies, appear responsible for a great deal of the credit crisis debacle.

In countries where local governments borrow more from commercial banks or specialty municipal lenders than from bond markets, the credit contraction proved sharper, primarily because of the poor condition of the largest banks. Interest rates increased for this reason. Consequently, in Europe, very old and established specialty lenders such as Kommunkredit in Norway or Kommunalkredit in Austria found it difficult to obtain finance capital. The state took over Kommunalkredit in the end. The French-Belgian Dexia, a world-leader municipal finance bank, went into technical bankruptcy and survived only through a rescue plan jointly proffered by France and Belgium. They had to recapitalize Dexia and guarantee its own borrowings, given the value of its outstanding loans to French and Belgian municipalities. In emerging countries, municipal specialty lenders appear affected in various ways. Some, such as CPSCI1 in Tunisia, traditionally turn to international donors and should not have much difficulty refinancing. Other institutions that look to the market for at least part of their financing, such as the Development Bank of Southern-Africa and the Tamil Nadu Development Fund in India, may also have to turn to international donors, preferably for subsidized loan products if such loans can be made in their local currency.

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1. Caisse de Prêts et de Soutien aux Collectivités Locales
HOW TO EXIT FROM THE CRISIS?
More than a year after the financial crisis, the American government has not shown any intention of carrying out significant structural reform. So far, treatments of the crisis have centred on the financial system (where a cure remains far off); policy issues regarding other sectors of activity have not yet been raised. The two mortgage finance GSEs continue losing a colossal amount of money – Fannie Mae alone lost $37 billion the first quarter of 2009 – due to provisions for delinquent loans: they will need more backing from the US Treasury. The central government plans to divide Fannie and Freddie into “good banks” with valuable assets and “bad banks,” which would carry delinquent loans and unsalable securities on their books (Zandi, Chen, de Ritis and Carbacho-Burgos 2009). The mortgage and bond insurers are studying a similar scheme. Some are attempting to isolate their “toxic” or bad assets in ad hoc entities, to facilitate a return to the municipal bond market with a double or triple-A credit rating. There is disagreement about the future of credit enhancement and its long-term viability, especially since confidence in the credit rating agencies has been seriously shaken. The three largest rating agencies, Moody’s, Standard & Poor’s and Fitch, form a de facto oligopoly. Their methodologies for analysing structured products proved to be riddled with error; they face accusations of conflict of interest (White 2009).

Associations of local governments put forward proposals to revive the municipal bond market through guarantee schemes. The first, classic-style proposition would require the US Treasury to guarantee municipal bond issues temporarily through the stimulus framework, the Emergency Economic Stabilization Act of 2008. The second proposition, which has the virtue of a permanent plan, would create a mutual guarantee fund. The fund would insure new, general fixed-interest-rate bonds and revenue bonds. It would be a non-profit national-level guarantee instrument managed by municipalities. However, it would necessitate government funding for its initial capital. In the current political climate, the necessary support for such a plan appears far from certain. Another proposal would create a public-private infrastructure bank at the federal level (Rohatyn 2009). The market and its participants await clarity on these and other issues. Many investors, politicians and other parties seem to think that once the low point of the economic crisis has passed and toxic products have been isolated – aside from reining in securitization somewhat – activity will take off again from its former, unchanged basis.

Europe’s financial system also saw massive state intervention. As stated above, the re-nationalization of Dexia and Kommunalkredit demonstrates that states consider local economies and municipalities critical. National governments’ aid to their localities shows common elements: tax abatements, such as reimbursing value-added taxes, special transfers, and stimulus plans for local economies. States with access to public or para-public financing instruments have applied them to restructuring certain loans or reviving suspended projects. In France, the CDC, a public financial

2. Caisse des dépots et consignations
institution, took an equity position in Dexia. In Germany, KfW, a bi-lateral development bank, was asked to rescue approximately one hundred municipalities holding leasing contracts with American banks, whose terms required review because of credit insurers’ downgrades. Spain plans to create a fund for local investments. The Spanish government took initial legislative action on a series of structural reforms in the urban planning and housing sectors, notably through a new property rights law designed to curb the ill-effects of urbanization and to outline the framework of a social housing policy. It also launched a plan to support rental properties with a series of tax and legislative measures. These initiatives complemented a massive debt restructuring plan for real estate developers that offered a three billion Euro line of credit to underwrite leases on unsold units, as well as a programme to buy reserved property.

Such measures comprise part of a wider-reaching plan that the Spanish government will undertake for the entire urban sector. It will address the local governments’ credit system, whose obsolescence and negative externalities became obvious once the real estate bubble burst. Spain provides one example of a general trend in Europe, where a movement to revisit clearly dysfunctional laws and arrangements has emerged following the economic and financial crises. In particular, local tax structures and relationships between central and local governments have come under review.

However, it is more difficult to obtain information about measures taken to support local governments in emerging countries. Government planners have apparently preferred local stimulus plans as the best general way to support employment. They face a two-fold difficulty implementing such plans: funds must be transferred quickly, which implies reliable and experienced administrative circuits, and the local level must have sufficient capacity to absorb the funds and execute the plans with due speed and urgency. These two conditions seldom occur in one place. Consequently, countries armed with instruments such as municipal development funds or urban development banks do better than those without.

**CONCLUSION**

Responses to the current crises may spark the creation of new financial instruments and new forms of credit, and find support in convergent policies. One example: the prospect of climate change elicited several new financing mechanisms, such as carbon credits for mitigation and some funds and initiatives for adapting to the effects of global warming. However, local governments, particularly those in developing countries, still face a considerable gap between needs and available financing. Credit instruments have proven insufficient, fractured and relatively ill-suited: they are complex and costly to use, and most are designed for sovereign or national borrowers rather than local governments (Paulais and Pigey 2009). Local governments mostly need advice and support to master the technical aspects of a credit

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3. Kreditanstalt für Wiederaufbau
file and grasp financing opportunities from different sources. They need assistance to enable the simultaneous exploitation of several credit sources, made difficult by administrative constraints, financial characteristics, competing schedules, legal backlogs, and so forth. Recently, the concept of a revolving or renewable fund has revived in policy circles, an option that could address many of these concerns.

Such a model worked in the United States in the 1980s, for grants emanating from the Environmental Protection Agency. Each state created a revolving fund where grants were combined with money from the market to create highly-subsidized loans for investments in environmental protection. The European Community, targeting urban renewal projects, recently created the Joint European Support for Sustainable Investment in City Areas (Jessica) Fund. It combines grants from the European Economic Community, state transfers and aid, local governments’ own monies, private-sector investments and loans or guarantees from the European Investment Bank and other financial institutions. The Jessica Fund uses local support teams in cities for its implementation. A number of financial instruments and recently proposed initiatives in different parts of the world emulate this model, as if the confrontation with global crisis causes policies to converge. The strength of the recovery at the local level will depend on the measures and reforms promoted by central governments. The solutions seen in this chapter show pragmatism, notably in their recourse to the concept of a semi-public economy, and rethink policies in light of knowledge gained in recent decades. Given the stagnation or even the relative decrease in international aid and the parallel increase in need, such an approach appears even more necessary for the least developed countries. After the crisis, financing sustainable urban investments will depend more than ever on mobilizing local savings, promoting housing and construction investments in particular, and in developing land and second-generation public-private partnerships.

**WORKS CITED**


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