

LEGACIES AND CHALLENGES OF URBAN AND REGIONAL PLANNING IN BRAZIL AND THE UNITED STATES

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Abstract

The twentieth century witnessed spatial transformations in Brazil and in the United States. The late ingress of Brazil in capitalism determined the pattern of economic growth, distribution of wealth and the shape of regions and cities. The United States privileged position in postwar economy contributed to increase investments and add millions of consumers in domestic market. However, they have some common elements: both experienced industrial decentralization which changed the subnational economic balance; both have adopted urbanization patterns that reinforced social inequalities and both are using similar strategies to face the post-1970's economic changes. Today, the urban and regional policy have been driven by guidelines that highlight elements such entrepreneurship, good governance as well a friendly land regulation to stimulate economic growth. But, the transplant of practices among countries do not consider its institutional features, political balances or living conditions. In a world supposedly without differences equality was replaced by efficiency.

Keywords: Urban e regional development, urban inequalities, Brazil, EUA, housing policy

1. INTRODUCTION

The twentieth century witnessed spatial transformations in Brazil and in the United States. The late ingress of Brazil in capitalism (Mello, 1984) and relationships set up between domestic and foreign capitals (Tavares and Serra, 1971; Cardoso and Faletto, 1969) determined the pattern of economic growth, distribution of wealth and the shape of regions and cities. Not only did the United States' privileged position in postwar economy increase investments but it also added millions of consumers in the domestic market. Despite the differences between Brazil and the United States some common elements can be identified: both countries experienced industrial decentralization, which changed the subnational economic balance; both countries have adopted urbanization patterns that reinforce social inequalities; and both of them have faced the post-1970s economic chances by using similar tools in spite of their different development conditions.

The article describes the differences and similarities between Brazil and the United States as they relate to the effectiveness of urban and regional development policies to reduce spatial inequalities. This work

is based on the idea that the capitalism dynamic produces inequalities as set out by different schools of economists, from the Marxists (Lenin and Trotsky, 1959), to the authors who studied the Latin American experience (Hirschman, 1958, Myrdal 1957; Prebisch, 1949; Furtado, 1961), until the institutionalists (North, 1955). There is no doubt that the government intervention can reduce social disparities, as well as provide support and stability for economic growth.

The paper is organized in three parts. The first part describes the process of industrial decentralization in the major regions of Brazil and the United States, and the second discusses the urban expansion in both countries. As a conclusion, the final part presents some challenges faced by both countries.

2. INDUSTRIAL DECENTRALIZATION AND ITS SPATIAL EFFECTS

The decentralization of the early industrialized areas in the Midwest and Northeast of the US began during WWII, although the process intensified in postwar period. In the 1950s the Northeast experienced a dramatic reduction of industrial jobs unlike the Southern states, which attracted population and investments starting from the 1960s. In the 1980s new industrial restructuring hit the East North Central areas (Markusen, 1985). The Northern industrial decentralization has divergent explanations. According to mainstream economists the convergence of production costs pushed the industrial plants to the Southern while non-orthodox authors believe that the displacement is a result of capitalism changes.

The convergence thesis is based on the idea of free movement of capital and labor, as argued by neoclassical economists. According to this mainstream approach, the low prices of land and wages appealed to companies under pressure from trade unions. Furthermore, friendly environmental regulation attracted industrial plants to the South, creating growth that reduced the income gap between the North and the South. In contrast, Perry and Watkins (1977) believe that the convergence thesis suggests a simply reproduction of production organization from the North to the South which is inconsistent with the changes in both domestic and international market. About the low wages argument they showed that 90% of total jobs created between 1940 and 1960 in the Southern factories had wages above national average. Low-wage jobs were only 40% of total employment in the Southern industries in 1960.

The United States economic growth in the postwar period was led by the expansion of agriculture, defense expenses and extractive industries (especially oil and gas), in addition to urbanization related activities, such as real estate and construction. All these segments shifted to the South. Perry and Watkins (1977) believe that the Northern cities failed to adjust to the changes in capitalism in that time.

The adoption of defensive strategies and the inability of adjustment of the Northern industries to the economic context prevented building a new investment cycle able to support the process of accumulation. As a result industrial plants and equipment quickly became obsolete and the Northern industry lost competitiveness.

The recovery of competition from Europe and Japan affected the major industries in the United States, such as automotive, textiles and electronics. The impacts in the North were bigger than in the South: between 1960 and 1978 manufacturing employment grew 59% in the South, 44.5% in the West and 13% in the Midwest while it decreased 11% in the Northeast (Ornstein, 1982). However rapid industrialization and economic growth were insufficient to modify the social inequality in the Southern. According to Glasmeier and Leichenko (1996) the poverty rate among the black population (31,6%) was three times larger than that among the white population (11,3%) in 1990.

Government expenditures in defense and infrastructure were crucial to economic growth in the Sunbelt. The share of defense expenses in the federal budget rose from 18% to 50% between 1940 and 1960 (Florida and Jonas, 1991). Pressures from industrialists and trade unions after WWII, Cold War politics, and conflicts in East Asia explain the increase of defense expenditures in the postwar period. The proliferation of military bases spread investments across the United States although large share of those investments was captured by the South. According to FY1984 federal budget almost 20% of defense resources were spent only in California (Markusen, 1994). The increase in defense expenditures was accompanied by the privatization of defense activities which opened up new opportunities to private sector, universities and research centers in the Sunbelt. According to Markusen (2003) the percentage of civilian and non-civilian employees diminished around 40% in the Department of Defense while private sector jobs grew 10% between 1972 and 2000. The pressure from the Southern representatives in Congress and spatial preferences of The Department of Defense are some of the reasons that explain the concentration of defense expenditures in the South (Markusen, 1985). After the Cold War a share of investments remained in the South as a result of the industry conversion programs that minimized the negative effects from the changes in defense expenditures policy (Markusen, 2000).

Suburbanization also redirected investments, population and jobs to the Sunbelt. As will be discussed below the combination of household income growth and productivity gains expanded consumption and profit opportunities. These elements found a favorable environment in the Southern which reinforced the attraction of public and private investments (Florida and Jonas, 1991).

Brazil also experienced large economic changes in the 1970s but the spatial effects were very different compared to the United States. The Brazilian industrial deconcentration must be understood in the context of its economic formation. The industrialization emerged from historical and political circumstances that allowed the capital accumulation in São Paulo State. The profits from primary goods export, friendly regulation provided by federal government, and import restrictions resulting from WWII increased domestic market consumption and investments in the Southeast, especially in São Paulo.

The growth of the city of Rio de Janeiro also supported the economic concentration in the Southeast. Since the late nineteenth century, when it attracted merchant capital activities, the city has been one of the most important import-export hubs in Brazil. Likewise, Rio de Janeiro hosted the federal capital until 1960. The presence of the top government bureaucracy brought the headquarters of large private companies, an important contingent of military forces and a lot of infrastructure to the city. All these elements helped to shape a middle class and develop a local consumption market. Thus the Rio-São Paulo axis quickly became the dynamic center of the Brazilian economy in the beginning of the twentieth century.

The Southeast leadership in the national economic integration and industrialization process has been the subject of debate. On the one hand Cano (1988) argues that industrialization in São Paulo created the necessary conditions for economic growth in other Brazilian regions and helped to retain a surplus within national boundaries which refilled the domestic market. On the other hand Oliveira (1977) believes that São Paulo economic growth was possible thanks to the net transfer of wealth from peripheral Brazilian regions. In other words Oliveira believes that São Paulo captured and subordinated the regional economic growth in Brazil.

In the 1970s the opening of international financial markets to underdeveloped countries allowed strategic investments in Brazil. Foreign resources were used to support the import substitution development model and build the Brazilian energy infrastructure. Public and private investments were directed to build the industry of intermediate goods especially in oil and petrochemical segments. Large petrochemical complexes were built in Bahia and Rio Grande do Sul in order to create new development poles. However, the emphasis on mineral and agricultural commodities resulted in productive enclaves featured by lower supply and demand churning. Many of those enclaves were born in the interior where the sources of raw materials were located.

The 1980s debt crisis and the austerity measures prescribed by International Monetary Fund (IMF) terminated the investment cycle. Private capital sought refuge in financial markets through financing the public deficit. Thus between the 1980s and the early 1990s Brazilian economy was featured by

instability and low growth. The need for a trade surplus to satisfy the external debt compromises and the fall of the domestic market (especially in the Southeast) displaced expenditures and investments to the interior in search of export-driven activities based on commodities.

Economic opening, privatization and the complete adhesion to mainstream shifted macroeconomic policy in the second half of the 1990s. The fiscal autonomy of subnational governments increased due to the end of the military regime in 1985 and the promulgation of the new Constitution in 1989. The new political environment allowed cities and states to enlarge their shares of the federal budget. However, the economic crises reduced overall revenues. Since 1995 the federal government has adopted several measures to recover its revenue, transfer expenditures to subnational government and control the public deficit at federal, state and local levels. The reduction of revenue and increase of fiscal autonomy created a perfect scenario for a bidding war.

In sum, the spatial shifts in the postwar period can be summarized as follows: i) despite industrial decentralization, the State of São Paulo continued to host the country's dynamic industries; ii) in the North and Northeast some productive enclaves prospered and became regional centers, while others survived thanks to tax incentives. Irrigation projects in the Northeast created fruit production enclaves oriented to export; iii) good environmental conditions and large research programs transformed the Central West into a global grain producer, which attracted the major national and foreign players in grain sector (in addition, this region received large investment in logistic and grain processing); and iv) the economy of the South, in spite of its connection to the grain sector, depended on domestic market performance.

In both Brazil and the United States the changes in industrial spatial distribution have moved a substantial part of the population to large metropolises. This has generated high demand for infrastructure and public services to support the new residents. Naturally, the lack of resources in Brazil make the task harder in comparison to the United States. However, in spite of the economic differences, the following analysis will show that urban policies in Brazil and the United States reinforced urban segregation and spatial inequality.

3. METROPOLITAN CHALLENGES IN BRAZIL AND THE UNITED STATES

In the United States, institutional instruments allowed urban sprawl in the postwar period. Rapid suburban expansion occurred in the New Deal period in response to the 1930s crisis (Florida and Jonas, 1991). The 1930s crisis was the result of the gap between productivity and wage growth which had compromised the accumulation process. Industrialists responded to the fall of profits through

defensive approaches, like salary and job reductions, which refilled the mismatch between supply and demand. Government intervention sought to minimize social conflicts and revive the economy through public spending. Housing was one of the major economic programs because it could be used in multiple directions: i) restoring the financial and mortgage system; ii) encouraging job creation and; iii) responding to the social demand for housing.

Housing policy in New Deal was built upon a dual system. On the one hand, funding for homeownership was directed to middle-income families. On the other hand, public housing and rental assistance programs were provided to low-income families. Although the dual system was designed to respond to the coalition forces that supported the government in New Deal, it remains until today. Public housing programs faced several political obstacles which prompted the government to adopt three different funding solutions: i) federal guarantees for private funding, ii) provision of public funds for housing and iii) public housing programs (Florida and Jonas, 1991).

The first step of New Deal policy was to restore credit by aiding the mortgage and bank system. The Federal Home Loan Bank (FHLB) Act of 1932 sought to revitalize mortgage finance through regional home loan banks which provided funds to mortgage lenders. In 1934 federal government set up housing insurance through the Federal Savings and Loan Insurance Corporation (Florida and Feldman, 1988). In addition, the Federal Housing Administration (FHA) reduced mortgage costs through the enlargement of funding terms, the reduction of interest rates and the development of insurance systems to cover the risks of mortgage lending. Pressures from FHA loans on the private market turned the long term contracts into the basis of housing credit which increased credit and housing access (Jackson, 1980).

According to Florida and Feldman (1988) the development of the secondary mortgage market by Federal National Mortgage Association (FNMA) created the tools to recycle capital, support the liquidity of mortgage-backed securities and introduce some market regulation. Bank savings became the main source of housing funds and the isolation of housing finance system reduced volatility in the mortgage market. In order to provide stability for the finance system the federal government created the Home Owner's Loan Corporation (HOLC) to refinance mortgage debt (Florida and Feldman, 1988).

Unions, women, and minorities pushed the government to increase the supply of public housing. According to the government the public housing program was a good solution to minimize societal pressures and create new jobs in a context of low economic growth. However the conservatives classified the housing program as a socialist program and erected some obstacles to its approval. Only in 1937 did the approval of the Wagner-Steagall Act guarantee the tools for the provision of low-income housing. Public housing grew rapidly in the second half of 1940s. The stock of units rose from 5,000 to

87,000 units between 1935 and 1941 which corresponded to 10% of all new units built in that period (Florida and Feldman, 1988).

The expansion of public jobs was also used by the federal government in the New Deal to foster economic recovery. Local governments were under pressure to provide relief measures to the population even though they did not have enough resources since the crisis had affected their solvency. To recover local finances and expand job creation the federal government set up funds to support public expenditures. The Emergency Relief and Construction Act of 1932 and the Hayden-Cartwright Act of 1936 allowed federal funds to support funding urban highways which was replicated several times in postwar suburbanization (Florida and Feldman, 1988).

In the close of the New Deal period, distributive policies were replaced by the horizontal ones. Suburbanization and neighborhood revitalization became some of the main tools adopted by the government to achieve economic growth (Walker, 1981). Suburbanization policy was, at the same time, cause and consequence of Fordism because it worked as a balance between the productivity's increment and consumption growth. It was a kind of anti-crisis mechanism to avoid the overproduction inherent of economy (Florida and Jonas, 1991). The combination of economic growth, increasing consumption, credit availability and government expenditures built a good business environment for merchant capital. Developers, landowners and financial institutions launched projects to capture the real estate profits. According to the authors the suburbanization strategy was only possible thanks to the privileged position occupied by the United States in the postwar world economy. The increase in housing demand and the intense competition among firms projected fragmentation and boundaries enlargement (Harvey and Clark, 1965).

As a result of income increases, millions of families expanded their housing and transportation expenditures in the postwar period. Thus, the automobile became the dominant pattern rather than mass transport which reinforced the enlargement of metropolitan boundaries. Between 1941 and 1961 annual household spending on housing and transport rose from US\$ 718 to US\$ 2513. Federal funding to urban transport incentivized automobile preference and suburban growth. The Federal Aid Highway Act of 1944 and 1956 expanded the amounts allowed to urban and interurban highways. Under those circumstances the government spending on highways increased from US\$ 636 million to US\$ 2978 million between 1955 and 1960 (Florida and Feldman, 1988).

Industrial deconcentration within metropolitan areas also contributed to suburbanization. However the movement was not a new phenomenon in the postwar period. According to Harris and Lewis (2001) firms have been leaving the central areas since the beginning of the twentieth century. The percentage

of manufacturing jobs located beyond the city-center's borders rose from 32% to 41% between 1900 and 1947. The elimination of union pressures and the search for low-cost land are some of the reasons for firm displacement.

The increase in public spending in the suburbs, just as civil rights struggles were reaching their peak, made the situation even worse in the cities. Large protests exploded in Los Angeles, Detroit and Washington in the 1960s and the federal government responded with measures to combat poverty and unemployment. The Opportunity Act of 1964 provided funding for job training, adult education and small business loans and in 1967 Lyndon Johnson appointed a commission (Kerner Commission) to discuss the riot's causes in order to assess and propose solutions. The commissioners concluded that displacement of economic activities to the suburbs had reduced job opportunities in central area. Thus, the suburbs should be opened to low-income families in order to eliminate the spatial mismatch between job opportunities and jobseekers.

The spatial mismatch thesis was pivotal to support the dispersal policy as strategy to combat poverty (Chapple, 2014). It was based on the premise that a spatial concentration of low-income families reinforces the vicious cycle of poverty because the high unemployment, lack of good education and a violent environment discourage initiatives of self-improvement. The dispersion of low-income families across the suburbs could help to reduce the unemployment and improve the living conditions. At the same time, the recovery of central areas could attract new investment and jobs to decaying neighborhoods. Based on that premise, neighborhood revitalization programs were born and became a popular approach inside and outside the United States from the 1980s.

In 1980 Reagan was elected based on the promise to cut taxes and expenditures and limit state intervention. The Reagan Administration urban policy was defined in two pillars: enterprise zones and the new federalism. The enterprise zone program offered deregulation, tax incentives and a friendly environment for business in order to attract investments and create jobs. The aim of the enterprise zones were similar to the early recovery neighborhood programs but oriented to a market logic. The new federalism sought to increase the subnational government's autonomy through the transfer of block grants and responsibilities. In practice the new federalism approach reduced the funding of subnational governments. The grants for state and local governments declined 37%; however defense spending increased by 4.1 % between 1981 and 1984 (Glickman, 1984). The effects of Reagan's policies on the low-income families were severe (Florida and Jonas, 1991) and Valler & Wood (2010) argue that Republican approach destroyed any chance to build a wide and articulated industrial policy.

The principles of competition and efficiency pioneered by the United States were quickly incorporated in other countries. The neighborhood and waterfront revitalization approach became the focus of urban planning. New models of governance and financing emerged from experiences such as London and Barcelona. But what was the role of these policies in developing countries?

First of all the Brazilian urbanization cannot be understood apart from the late Brazilian insertion in capitalism (Cardoso de Melo, 1975). In Brazil, the cities were born as a platform of domestic and foreign merchant capital, where the trade in intermediate goods between developed countries and interior took place. The import-export activities, bureaucracy institutions and local consumption market provided the impetus for the development of some coastal cities while the fragmented urban structure in the interior attended the local production needs and served as a repository for the reserve labor force since a large part of the low-income population belonged to the subsistence economy.

As mentioned above, the integration of the domestic market occurred via the State of São Paulo. The city of São Paulo, which is the capital of the state of the same name, became the core of the national economy. Its metropolitan area has developed a large consumption market and still hosts relevant part of the consumer durable goods industry that had attracted high migration flows. The São Paulo city population grew from 240,000 people in 1900 to 580,000 in 1920 and to 1,000,000 in 1934. More than 30 million people left rural areas in the 1950s and 1960s (Martine, 1990). The social situation did not become explosive because of the intense economic growth that created enough jobs to absorb large part of the new residents. Besides, the increase of service sector caused by urbanization opened to thousands of formal and informal jobs. However, the federal government adopted measures to minimize population growth in large cities which Cano (1988) called as "social shock absorbers".

The enlargement of agricultural frontiers was one of the social shock absorbers used by federal government especially in the 1960s and 1970s. Nevertheless, the rural retention programs were contradictory and the results were less than desirable. On the one hand the chronic lack of land access has not yet been solved in Brazil and despite the increase in support to small rural producers, it still needs improvement. On the other hand large rural producers have been receiving subsidized funding to agricultural modernization which reinforces the rural exodus. The agricultural programs set up in the 1970s are good illustrations: while the agricultural frontier in Rondônia received 300 people, São Paulo city received 3 million migrants (Cano, 1989).

Urban sprawl and deterioration of living conditions in the major cities, such as São Paulo and Rio de Janeiro, have been replicated in the mid-size cities in a movement that perpetuates the chronic pattern of urban inequality in Brazil. Since the beginning of Brazilian urbanization the reservation of urban

spaces to the accumulation of merchant capital and the lack of effective housing policy directed to low-income families have increased urbanization costs. Therefore low-income families have been pushed to periphery while middle and high-income ones have lived in central areas where infrastructure and public services are available (Brandão, 1998). The social inertia in Brazil can be illustrated by the evolution of housing policy.

In the early twentieth century housing in Brazil was guided by two logics: i) worker neighborhoods were built by the major companies around industrial plants as a strategy to control the workforce; and ii) small investors (like liberal professionals, traders, etc) and some banks built housing units for rent. The rapid urbanization brought new profit opportunities which attracted the major developers who helped to consolidate the real estate market in the 1930s. The real estate industry served the middle and high-income families and was accompanied by infrastructure and public services (Fix, 2011).

In Brazil, the housing finance system was fragile, restricted and fragmented in the first half of the twentieth century. The main source of housing financing was provided by finance cooperatives organized most of the time by unions. In 1946, the federal government centralized the housing financing system creating Fundação Casa Popular, yet the access was restricted. Large changes in housing financing occurred in 1968 when all of the Brazilian finance system was restructured by the military regime. The finance restructuring created a new, long-term and cheaper financing source based on the social security fund, which is called Fundo de Garantia por Tempo de Serviço (FGTS). Not only did the FGTS resources support the housing funding, but they also supported the city and state investments to provide water and basic sanitation.

The Sistema Financeiro da Habitação (SFH), which is the federal housing funding system designed by the military regime, supported more than 4 million housing units between 1964 and 1986. Around 2,4 million units were directed to low-income families while the other 1,9 million were occupied by the middle-income households. Around a quarter of the new housing units built in Brazil between 1964 and 1986 were supported by SFH (Bonduki, 2008). But the mismatch between the maturity of assets and liabilities as well the restrictions in the federal budget disarticulated the funding system in 1986. The Caixa Econômica Federal (CEF), which is a bank controlled by federal government, became the most important provider of housing funding, followed by private banks. However housing credit became less affordable. The middle-income families were able to access the housing system, but the low-income families were left to the self-built housing solution in slums or illegal settlements (Fix, 2011).

In the context of financial openness the housing funding system was restructured again in 1997. The government expanded the credit and reduced financial costs by fostering competition in the financial

system. Two different systems were created and remain until the present day: the Sistema Financeiro da Habitação (SFH) and the Sistema Financeiro Imobiliário (SFI). The new SFH has followed the same features as the old SFH, i.e. the capital source is the FGTS and the funding is directed to low and middle-income families. The SFH offers reduced interest rates and they can vary according to the income family level. The subsidies are very high in low-income housing. In contrast, the SFI operates according to the market rules and its financing sources are pension funds, investment banks, insurance companies, etc., located in Brazil or abroad. Its interest rates and loan terms are freely negotiated. In recent years, a large part of SFI resources have been spent to finance commercial enterprises.

Brazil and the United States have different historical trajectories and their positions are quite different in the world economy. However, similar consequences are resulting from the adoption of the market-driven urban planning by both countries. For instance the neighborhood revitalization programs are resulting in gentrification and intensification of land struggles. Indeed the increase of spatial inequalities is not an isolated phenomenon in Brazil or the United States, but it is the core of the capitalist urbanization in the twentieth century (Soureli and Youn, 2009).

4. THE CHALLENGES OF URBAN AND REGIONAL POLICY

The effect of the 1970s crisis upon private capital strategies and government policies was to heighten spatial disparities among regions and within cities. The shift of industrial plants intensified the competition within and across national borders. Although Brazil and the United States share many common elements there are differences too. Both countries experienced industrial decentralization in the 1970s, however the United States displacement to the South was accompanied by a new cycle of investments that increased the household income and expanded the consumption market. In other words, industrial deconcentration in the United States reduced the income gap between the North and the South. As mentioned above this was possible because of the privileged position of the United States in the postwar economy.

The same crisis that affected the Northern industries in the United States helped the underdeveloped countries because it opened the international financial market to those countries. In Brazil, foreign credit supported investments in infrastructure, especially energy, and built the intermediate goods industry, which was strategic to complete the Brazilian industrial matrix. Among underdeveloped countries in Americas only Brazil and Mexico have a large and complex industrial structure. In the 1980s São Paulo started an embryonic information technology industry that was destroyed by the economic openness ten years later. In contrast, the focus on agricultural and mineral commodities prevented the development of

a complex industrial matrix in the periphery of Brazilian areas. Therefore the income gap among regions in Brazil was less reduced than among the regions in the United States.

The investment in Brazilian peripheral regions was oriented to export. Unfortunately the political coalition dominated by local oligarchies maintained the vicious cycle of poverty and uneven land access. Therefore the advanced economic segments have worked side by side with outdated productive structures reproducing a pattern that can be found in several underdeveloped countries. Although an investment cycle started in peripheral Brazilian areas it was not enough to create a supply and demand chain or develop a consumption market as occurred in the United States. The local surplus has been captured by local oligarchies and investors located in the Northeast or abroad.

In the 2000s a combination of domestic and foreign factors expanded household incomes. On the one hand, the increase in commodity demand by the world market expanded investments and economic growth. On the other hand, the rise of the minimum wage and welfare expenditures proved a stimulus to reduce poverty. The increase in income allowed the expansion of consumption especially among low-income families. According to IPEA (2013) the increase in median per capita income (5.6%), minimal wage (5.3%) and per capita household consumption (3.2%) were bigger than the rise of per capita GNP (2.6%) between 2002 and 2012. Everybody was happy in the 2000s: federal government captured the political capital while private capital took the profits.

In the spatial sphere all Brazilian regions recorded economic growth in the 2000s but its effects were higher in the poorest regions. The Northeast is one of the poorest regions in Brazil. Almost half of total Brazilian minimum wage workers live there and the region receives 55% of total resources destined to Bolsa Família program, which is the income direct transfer program supported by federal government. However the increase in family income produced a large effect on the local market. According to Araujo (2014) the retail sales in the Northeast rose at a pace above the national average between 2005 and 2012. Thus, the Northeast experience shows how a better income distribution can provide profits and improvement of living conditions.

Another common element shared by both countries is the bidding war as regional development strategy. In the United States several subnational governments have adopted tax incentive programs (Chapple, 2013). The effects of tax breaks are usually temporary. The gains are captured only by local government when the disputes occur within state boundaries (Peters and Fisher, 2004) and the job creation is neutral as jobs are simply moved across the country. However, several local administrations have adopted the strategy due to political pressure.

In Brazil the bidding war became common only in the 1990s for different reasons. First, the military government centralized a large part of revenue and only after the promulgation of 1988 Constitution did states and cities achieve a certain level of tax autonomy. Second, until the debt crisis in the 1980s favorable economic conditions had allowed federal government to attend to the demand of subnational governments. Third, economic restructuring in the 1990s reduced financing alternatives for the states. In addition, the tax break strategy can be a good deal for some Brazilian states and cities because of the design of the tax system, which allows the transfer of part of tax incentive cost to the states where the sales occur (Varsano, 1997).

The endogenous development approach became popular not only in Brazil and the United States, but also in several countries. The endogenous approach can assume different shapes from traditional industry cluster to high-tech cluster. However the Silicon Valley approach has become the object of desire of local governments around the world. In the United States, programs based on endogenous development are present in several American states. About 30% of these programs include some type of technical assistance, such as incubators or training activities (Chapple, 2013). Though the success of high-tech industries in the United States is related to the massive public investment in defense, the technology incubators approach has been adopted all over the world without this public stimulus. Therefore the results can differ. For instance, Tamasy (2007) showed that the regional development results in Germany did not justify the investments in incubators programs.

In Brazil, the endogenous approach became the official policy for all levels of government. The Banco Nacional de Desenvolvimento Economico e Social, which is a federal bank oriented to support long-term investments, provided funding to several clusters across the country. In particular to high-tech clusters Brazil has had different experiences. Several cities self-denominated technology poles in order to justify tax subsidies to an agglomeration of computer support companies that provide low-skill services. But there are also experiences involving universities and large companies that develop based on research and equipments. Two experiences can provide a contrasting view of the Brazilian context: i) the technology pole of Rio de Janeiro and; ii) the defense complex of São José dos Campos.

The pole of Rio de Janeiro grew fast from the late 1990s when Petrobras went public and attracted the majors players in oil industry. The pole is located at Universidade Federal do Rio de Janeiro campus and it is supported by resources from several oil companies to develop equipments and new process for the oil industry. Led by Petrobras, the pole of Rio de Janeiro contains all the elements that justify the idea of technological pole.

The history of the defense complex of São José dos Campos is more interesting. The complex was born in the 1950s and was set up by the Brazilian Air Force base. Around the base emerged several key institutions, such as Centro Tecnológico Aeroespacial (CTA), responsible for Brazilian aerospace program, and state companies, such as Embraer and Engesa. Embraer is an aircraft manufacturer that was controlled by the state until the late 1990s. Nowadays, Embraer is a competitive private business in the mid-size jet market. Engesa was a ground combat vehicle manufacturer and a parent company of several plants linked to defense industry. The Engesa closure is related to international competition in the defense industry as well as policy decisions. Those experiences sought to replicate the American defense industry pattern but the indiscriminate privatization in the 1990s destroyed the institutions and human capital that had survived the 1980s crisis. These days, there are only the aerospace program, which is suffering by lack of resources, and Embraer, which is controlled by private capital.

One of the relevant similarities between Brazil and the United States is the pattern of urban segregation, which is prevalent in both countries despite their differences. The urban core in several US cities has attracted new wave of immigrants to live side by side with previous minorities (Sourel and Youn, 2009). Therefore the pressures over housing and labor market have been intensified. The dispersion approach as an anti-poverty strategy has not achieved the desired effects. According to Chapple (2014) the failure of the dispersion policy is related to defining the physical proximity as key without considering the social relations into and among neighborhoods. She believes in the importance of rethinking the scale of public intervention beyond the neighborhoods boundaries in a movement of regional integration. By doing so, the expenditures in community development, health and education would create a virtuous cycle, increasing job opportunities and living conditions. Despite the potential alternatives, the US metropolitan areas are facing the increasing environmental and infrastructure costs and governance challenges in a mosaic of independent administrative units. The question to American planners is: how to reverse a fragmented urbanization pattern without changing the delicate balance of political forces into regions?

Although some economic and social conditions in Brazil have improved, fundamental issues that have supported the cycle of poverty were not broken. The housing policy clearly illustrates the challenges facing the country. In 2000, the housing deficit in Brazil was 5 million units and around 80% of this deficit was concentrated among families whose income up to three times the minimum wages. But the number of unoccupied dwellings in urban areas was 4.5 million units, many of them located in areas with infrastructure and public services (Bonduki, 2008).

In the scope of the housing funding system mentioned above, the federal government set up a program called Minha Casa Minha Vida (MCMV) in 2009. The program has two lines: the first one provides low-

cost dwellings for families whose income are up to three times the minimum wages, while the second one supplies housing funding for families whose income can vary from four to ten times the minimum wages. In both lines, the source of resources is the FGTS, which means low costs funding. Besides, the first line has subsidies that can reduce dwelling price from 60% to 90%. Despite the high subsidies, only 40% of total dwelling production is directed to low-income families although 80% of housing deficit is concentrated in this share of population. Substantial amount of resources are directed to middle-income families, which is the consumer segment who usually offer the highest profit rates to real estate market (Maricato, 2009; Arantes and Fix, 2009).

The urban planning guidelines also seem to have not changed in several Brazilian cities, as can be seen in Rio de Janeiro experience. Justified by mega-events hosting, as for the 2014 World Cup and 2016 Olympic Games, investments have been made in mass transit and waterfront revitalization. However, the selected areas have potential to offer high profits, while many other low-income neighborhoods have been suffering from lack of public services and infrastructure (Oliveira, 2011).

Urban and regional policy in Brazil and the United States have been driven by guidelines that highlight elements such as entrepreneurship, human capital attraction, good governance as well as friendly land regulation to stimulate economic growth. Although diagnostics can vary among authors, most of them support their recommendations with the following principles: i) globalization is the engine of the new world economy and ii) cities as well as firms must increase their efficiency to achieve success in world market. The transplant of best practices among countries do not consider their institutional features, political balances or living conditions. In a world supposedly without differences equality was replaced by efficiency.

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