

The "Managed Revolution": governing primary and secondary education reforms in Brazil: 1995-2010

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1. Introduction

Inequality is a secular trait of Brazilian society. Having it roots in the XV-century colonial pact and XVI-XVIII century slavery, inequality has been steadily growing throughout the centuries due an errant development trajectory [Fig. 1] characterized by a mix of oligarchical politics often renewed by elite insiders circulation, deep regional social disparities as a result of surge and decline of regional commodity-based productive vanguards, volatile growth due to permanent vulnerability to external shocks, and – finally – sporadically *de jure* social inclusion only.

From 1964 up to 1985, military rule reinforced that trait for the sake of producing accelerated growth "under forced march". Boosted by huge investments in infrastructure, the inward-oriented import-substitution model generated accelerated growth during 60s and 70s as promised, up to its fiscal exhaustion in early-80s and political fatigue in mid-80s. A negotiated transition toward a full electoral democracy, led by civilian president-elected put an end of military rule. However, legacy in terms of inclusion was appalling: one of the highest income inequalities among developing countries in the world by 1985. [Skidmore, 1995].

Democratic Transition (1985-1993) was a bumpy road in several domains of public life: the 1986 Cruzado Plan, the 1988 Constitution, the 1990 hyperinflation, the sequence of failed monetary stabilization plans ("Plano Cruzado", "Plano Cruzado I", "Plano Cruzado II, "Plano Bresser" and "Plano Verão") including 5 (five) different currencies in a period of 6 years, the impeachment of the first president elected by the popular vote since early 60s in 1992 were all chapters of a roll coaster sequence of events that shook not only Brazilians' trust in their government but also their confidence in being protagonist of their own future.

Having managed transition to democracy and monetary stabilization, the "social debt" turns out more vivid in Brazilian social imaginary: 25% of illiteracy (63% among the poor) in contrast with huge infrastructure project carried out around the country in benefit of Brazilian middle-class. Mitigate the "structural drivers" that creates and reproduce of inequality became the very mission of the Cardoso Administration, elected President in November 1994 under a huge "tunnel effect" in the aftermath of monetary stabilization, the end of inflation and its immediate positive effects on poor household's purchasing power.

In this sense, Cardoso (1995-2002) and Lula (2003-2010) terms can be seen self-reinforced virtuous cycle of increasingly inclusive responses focused on the redistribution of national income with the purpose of gradual inclusion of "the people": blue-collar and informal workers, vulnerable groups, small rural proprietors and peasants – among other disfranchised groups. [Fig. 2]

The package of structural reforms implemented during the period was diverse covering several different public policy domains and focusing not only on policy components but on its governance. Among those "inclusive responses", Cardoso Administration included the **reform of primary and secondary education** as top-priority – a reform that could be anticipated as particularly hard due to its **high cost**, wide scope, collective action dilemmas, political sensitiveness, intertemporal choices and low return on inequality on short/mid-run.

If so, why an entrant administration chooses primary/secondary education as its flagship reform? Is there any other option available? What were the limitations constraining those options? Why, so, the Cardoso Administration insisted on inclusion by education?

2. The (partial) case for education reform as an "inclusive response"

It's somehow difficult to make the case in favor of education as a vehicle for mitigate inequality in the short/mid-run. To understand its limitations as an "inclusion", it's important to revisit in detail the effects of education in growth, development, distribution and social mobility – making difference between inclusion and equality.

2.1. Education, Growth and Development

Education is the main platform for growth and development. **No country can achieve sustainable economic development without substantial investment in human capital.** Among late-democratized late-developed countries investment in basic education has made a huge difference as an inclusive response during transition towards rule-by-law political competitive setting resulting in virtuous growth trajectories (such as Korea) and erratic ones (such as Brazil).

In economic growth domains, primary education offers the launch pad for labor productivity in rural and urban areas – especially when combined with appropriate condition during the early childhood years

(parenting, heath care and nutrition). Secondary education (including vocational training) facilitates the acquisition of skills and managerial capacity. Tertiary education supports the development of basic science, the appropriate selection of technology imports and its domestic adaptation and/or development of technologies within national boundaries. **Higher levels of educational attainment are strongly correlated with political order stability and the emergence of institutions of government, the law, and the financial system, among others -** all essential for economic growth [Ozturk, 2001]

Education is key for developing "know-how" for technical progress. While tools (embedded knowledge) can be shipped around the globe and information (coded knowledge) can be consulted over the internet, "know-how" exist only as embedded in peoples' minds and is hard to move around [Hausmann, 2016]. Returns on educational attainment depends on schooling-years associated with the specific tacit knowledge ("knowhow") demanded by international/domestic strategies taken by each country.

It's fair to say the education attainment and development (measured by GDP/per capita) are strongly correlated in the long run. However, this relation is mediated by several mediators and moderators in short/mid run such as job creation, wages increase, inflation and so on. If these mediators and/or moderator are not there, the direct positive relation collapse.

In sum, when it comes to economic growth and human development, returns of investments in education are costly, uncertain, and paid off in long run – while hard reforms demand clear results and early victories to be politically sustained.

2.2. Democracy, Distribution and Education

Democracy is expected to increase redistribution an reduce inequality. However, this expectation may fail to be realized when assets allocations is captured by the economic elites ("capture"), when it caters to the preference of the middle class ("clientelism") or loyal groups ("patronage") or when it opens up equalizing opportunities to segments of the population previously excluded from this activity ("unequal inclusion") [Acemoglu at all, 2013].

¹ In Brazil, inward-oriented growth pays higher premiums on wages to white-collars college-degree holders, grant them social status and some legal privileges. For instance, in Germany, outward-oriented growth based on exports of high-value added industrial goods pays higher premiums on wages go to high-skilled blue-collars workforce graduated from technical schools.

In this regard, limited redistribution is an outcome of a country's political process. Elite bargain-based political settlement prevents the poor from politically implementing their will at the expense of elites' welfare. [Harms, Zink 2003]. Inclusion advances gradually and redistributions use to be made "at the margins": small portions of national income "conceded from the top as pressure from the bottom to respond with a more inclusive growth amounts – always in a way that "feed the pray" [Olson, 1993] and preserve political status-quo and elite privileged access to state rents.

Inequality in education is in line with the elite interests. A country with qualitatively better-educated skilled workers relative to unskilled workers has a higher ratio of human capital lo labor than a country where the quality of education is more equal across educational level. In some dimension, inequality in education quality pays off not only for the privileged at the end of educational journey – due to the fact an elitist education produces higher wage gaps – but also to the economy as a whole – in a way that allow technological leapfrog in some specific labor-intensive economic sectors left behind due to specialization [Walde, 1999].

Reducing inequality have social welfare costs. Inequality is conducive to the adoption of growth-retarding policies. Several authors have documented a negative relationship between initial disparities of income and wealth and subsequent aggregate growth [Alesina and Rodrik 1994]. As consequence, greater inequality translates into a poorer median voter relative to the country's mean income [Meltzer and Richard, 1981]. This leads to increased political pressure for redistributive policies that, in paradox, is led by elite-driven structural reforms that are unambitious in scope and gradually in pace to try not affect growth rates. [Benabou, 2009]

Education is a very expensive and inefficient way of carrying out limited redistribution. This is because those who have been more favored by nature, luck or previous early childhood conditions are also those who benefit most from the public investment in primary and secondary education. If public education resources were distributed according to the ability to benefit – as allocative efficiency would recommend – the better off should receive more, which is clearly inequitable [De Fraja, 2006]. Public education spending is productive inefficient by nature – and that explains why allocation must be drive by other criteria than efficiency only.

Education is a merit good. Benefits of increasing in education attainment are privately appropriated by student as degree, but also spillover society. [Smethurst, 1995]. This not only justifies its public provision

but make education – especially primary and secondary – a redistributive mechanism that, ceteris paribus, does not adversely affects intertemporal allocation of income/wealth in favor of elites or middle-class as it clearly occurs with rents, cash transfers or entitlements. Redistribution usually takes a form of higher taxes in the long run to finance transfers to the poor in the short-run or to fund pro- poor structural reforms in mid/long-run. In this sense, the fiscal costs of reducing inequality is somehow socialized. On the contrary, fiscal cost of expanding education opportunities can be discounted against the future generations of workers.

Actually, socio-economic group forms lobbies to influence education policy making. The formation of lobbies depends on the type of reform / investment planned and – in the case of education – used to concentrate in the early stages of decision-making: especially on the agenda-setting. Part of persistent inequality in supply-side components of public education provision services can be attributed to persistent lobby of wealth that lead to an allocation of public education spending more biased towards them [Zhang, 2008]. In the case of Brazil, this pattern is clear when spending to beneficiary ratio is compared across educational levels [primary, secondary and tertiary public education], considering the latter is overpopulated by the wealthy than the former.

Finally, public provision of education is usually viewed as a form of in-kind redistribution. Literature shown there is a preference **trade-off between income redistribution and public education**. When the cohort size of the young among the population is too large – as in Brazil – income distribution crowds out public provision of education in the political equilibrium [Levy, 2005]

In sum, when it comes to income redistribution, investments in primary/secondary education are: (a) costly, (b) have low productive efficiency, (c) aren't entirely appropriated by the direct beneficiary, (d) can be easily limited by the elites, and (e) easily crowded out by more efficient substitutes such as direct cash transfers – specially in *de jure* democratic *de facto* oligarchical political settings and countries where demographics are biased toward the young, such as Brazil.

2.3. Education, Mobility and Social Status

In developed world, the metric most predictive of a child's education success is the household income. In developing world, that metric is the household's chief educational attainment – measured by years of

schooling. The case is attending a good public school isn't nearly enough to overcome the effects of limited family income, but scarcity of human capital in developing world make education a promising journey – even when costly, longer and uncertainty – to higher social strata [Shultz, 1961],

The redistributive effects of education expenditure strongly depend on which level of education is funded. Despite of unitary costs being lower at primary level and increasing dramatically from lower (primary and secondary) to higher (tertiary), developing countries tend to spend comparatively more on the later and thus have a **less redistributive way of spending on education** [Birdsall, 1996]. The political determinants of this **bias toward tertiary** are explained by the effect of schooling on social status. In Brazil, college degree holders not only receive higher wage premium, but enjoy a differentiated social status – one that **grant privileges in several domains of public life**, such as "special regime of incarceration" according to Brazilian criminal law.

On the other hand, early-stages trajectory (public vs. private primary schools' attendance) strongly predicts trajectory on the next level and performance at the entrance of the tertiary level because of path-dependence, disparities in educational services quality and a great deal of credentialism. That state-of-affairs make an even stronger case for education reform focused on equalizing quality despite of its sub-optimal allocative efficiency as policy mechanism for income distribution.

In sum, education generates a sense of inclusion, but not necessarily a more equal distribution of income or wealth.

2.4. Beyond "Educationism"

These previous considerations show "educationism" is tragically misguided. Education is not the milestone of social inclusion and better primary schools won't fix growth, development or inequality by a magic touch. Investment in education can create a lunch pad for growth, but virtuous growth depends on capital accumulation, investments and constant rising in productivity. Education is one the metrics to check if economic growth translates into human development, but human development by education are high-ranging fruits to be collected by future generations.

Finally, returns on investments in education or in education governance reforms depends on large and

diverse panel of mediators. Ideological predisposition, sticky institutions, previous historical experiences social norms, administrative capacities and – of course – the politics of the day matters a lot. Public sector bureaucracies need to design and assess the benefits and costs to society of specific policy options – and assign budgetary resources to the highest return priorities. At least in short/mid run, education is not the single optimal choice.

Public education reform is just one among several other options of inclusive responses. However, it has a very important strength in particular: it's a type of in-kind inclusion that is easy to sell. It can experience collectively on daily-basis, hurts (almost) nobody interest and (almost) nobody is (publicly) against it.

Having smiling children attending pristine schools is a prime on everybody hearts and minds, but a laggard on someone's interest. It's easy to sell but hard to deliver on.

3. Public education in Brazil: multi-level provision, asset allocation autonomy and incomplete devolution.

Public education provision in Brazil is a **multi-level collaborative enterprise**. In general terms, service provision responsibility varies across administrative levels: municipalities are mainly responsible for primary level; states are responsible for secondary level, and federal government presence is predominant at tertiary level².

Each administrative level has **some degree of autonomy to allocate funds and assets according to local priorities** and set its own **demand-side governance schemes**, but have to comply with a legal framework, policy guidelines, administrative rules, and a timeline to reach qualitative/quantitative supply-side service provision goals on coverage, delivery and quality negotiated with Brazilian Ministry of Education as conditionality to access federal funds and targeted programs to solve the several supply-side gaps in place – from teacher's adequate pedagogical to updated textbooks purchases.

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² This stratification does not mean exclusivity: some municipalities and states (for instance, Campinas and Rio de Janeiro States) manage universities (UNICAMP and UERJ). Brazilian federal government manage some secondary schools (such as Colégio Pedro II),

This integrated system aims it trifold: (a) compensate huge regional disparities in terms of funds and capacity in primary education sector, (b) leave room for accommodate local cultural, ethnic and – sometimes – religious traditions that characterize a continental-size, melting-pot country such as Brazil and (c) allow some degree of student's horizontal mobility within the system – in the case families move from one city to another.

Actually, over/under funded positions does not explain or exacerbate differences. On the contrary, **federal funds works as equalizers and stabilizers** – think about European Union's Structural and Investment Funds, such as European Regional Development Fund (ERDF) – in sort of pay-for-success, coaching, **stick-and-carrot logic**. Chronic insufficiency of tax revenue at local level strength dependence from regular federal fund transfers creating incentives to vertical accountability and strict compliance. Fails in compliance blocks to access to subsidized loans for infrastructure investments granted by state-owned banks such as Brazilian Development Bank (BNDES) and Caixa Econômica Federal (CEF).

Despite of the conditional access to federal funds and asset allocation autonomy at local level, states and municipalities authorities criticize a permanent state of **incomplete devolution**: growing demand for primary and secondary education at local level often translates in imbalances between operational responsibilities and financial availabilities.

4. "The Managed Revolution": rule-of-law vs. personalized competition

In a continental-size federative country such as Brazil, public education reform is not only hard, but big and multi-layer problem. In a nutshell, a wicked problem.

All sorts of collective action dilemmas jeopardize functionality. Multiple principles and multiple agents in a **polycentric governance** without a centralized framework offering structure and limiting agency make vertical and horizontal collaboration impossible. Absence of agency constrains and rules to comply with is an invitation to patronage and clientelism – both kind of substitute of lack of institutionally that is conductive **to status quo bias, aversion to risk, opportunism and free-riding**. Information cost on gathering decentralized data on students, teachers, administrative personnel, curriculum, pedagogical practices, infrastructure without a centralized information system are high. Absence of national standards or guidelines – from textbooks to teacher's pedagogical competences profiles – combined with abysmal

differences in **administrative capacities** among regions, states and municipalities make **transaction costs** skyrocket and give no room for economies of scope or scale. If there is no standards or minimum requirements, there is no homogenous criteria or metrics. Where there is no metrics, there is no goals. If there are no goals, there is no evaluation. If there is no evaluation, there is accountability. Where there is no accountability, does not matter if there is success or failures. If we do not know differences between success and failure, there is no learning.

Vertical/supply-side policy multi-level functionality improves with legitimacy offered horizontal/demand-side local governance. Purposeful civic engagement (drama, confrontation, conflict, cooperation or collaboration) came after awareness and interest. If there is no transparency, there is no awareness. If there is not awareness, there is no interest. If there is no interest, there is no participation – and where there is, interest results in capture when there are no institutionalized channels to manifest and defend interests in front of the general public. And of course, there is no collaboration when benefits are captured by a few vested interest groups.

That's not a bad description of the state-of-art in public primary/secondary education prior to the management revolution that took place during Cardoso (1995-2002) and Lula (2003-2010) administration.

The Managed Revolution was the result of the encounter of the vigor of technocratic reformers living in a rule-of-law competition environment (re)established at national level in late 80s with the perils of local political elites enjoying a personalized competition-type order of business in the hinterlands of Brazil since the 40s [Fig. 03]. The political economy, the policy initiatives, the outcomes and the remaining puzzles of these encounter are discussed further.

5. The political economy of "The Managed Revolution": harmonizing policy and governance

The political economy of education reform can be understood by an analytical framework offered by [Grindle and Thomas, 1991]. The framework consists in 3 (three) components: (a) the environmental context (policy elites' preferences and policy choices available due societal, historical, economic, administrative and legal limitations), (b) agenda-setting circumstances (civil/political/social unrest and decision-making concerns) and (c) policy characteristics (arenas of conflict and resources for implementation and sustainability). [Fig. 04]

5.1. Environmental context: policy elites and policy choice

Implementation of structural reforms depends on policy elites. Policy elites are formed by groups of highranked civil servants, technocrats, renewed scholars, think tanks experts and practitioners serving in multilateral agencies. These groups are the ones that influence reform proposal drafting, submit them for Congress approval and, if so, disaggregate them in actionable integrated coherent programs. In the case of Brazil, these policy elites were renovated with the 1998 Constitution that have established public tenure as an exclusive hiring modality of new public servants – according to specific skill profile for each job post. Implementation of this disposition through country took time. By mid90s, state and municipalities were in the middle of their transition to a professionalized permanent civil service. To cope with entrenched resistance at national level and local heterogeneity, Cardoso Administration have decided to occupy some functional Ministries with technocrats compromised with reform – some of them coming for the academia, some coming from state-level "island of excellence". The Cardoso Administration created small groups of technocrats hand-picked by academic credentials, expertise and loyalty to the President and spread them across key ministries (Finance, Education, Health and State Reform). The idea was concentrating the use of political appointment's quota granted by the 1988 Constitution in these functions to advance thigh-controlled ambitious reforms - and let political capture and rentseeking operating more freely in other functional domains as the price to pay for stable parliamentary political coalitions.

Ideological predispositions were in line with education reform once Cardoso alliance was right at the center of political spectrum (PFL on the center-right, PMDB on the center, PSDB on the center-right). At the head of the alliance, a social-democrat French-style President appointing a social-democrat expert education economist former-dean of one the most important public university of the country, as Ministry of Education. **Professional expertise and training** were granted by recruiting talents from the academia and send high ranked officer to be trained and learn from experiences abroad. Part of these exchanges were implemented by the "Special Ministry for State Reform" (created in 1995 and led by another public administration scholar) and funded under agreements with multilateral agencies such as UNDP and IDB. **Memories of similar policy situations** and failed tentative of advance similar reforms focused on fiscal transfers towards municipality only – such as Brazilian Movement for Literacy (MOBRAL) – have biased reformers toward a more comprehensive Weberian-type tight-controlled reform. A top-down approach could be favorited due to control of tax income at federal level – despite of non-discretionary

constitutional-based rules disciplining periodic transfer among federative units under the Federative Pact.

However, Cardoso Administration **political commitment and loyalty** toward regional political elites that get him elected in 1994 against Lula must grant some degree of autonomy at local level, allowing local authorities move forward with some degree of patronage at municipal-level education bureaucracy (for instance, do not imposing hiring procedures or competence profiles for mayor appointment for education secretary) and at school level (for instance, do not imposing the same for school' principal appointment) to let them preserve their own loyalties themselves.

As discussed before, context was not especially in favor to the adoption of an education structural reform. Societal pressure was in its low due to rise in household purchasing power under low inflation, but historical context was one of general confidence and timing for structural changes: a virtuous Hirschman cycle of inclusive responses fueled by "tunnel effect" was just possible by alignment, timing and sequencing of previous domestic conditions and a positive external shock: macroeconomic stabilization, the articulation of a costly (but stable) parliamentary coalition led by a majoritarian centrist group (called "Centrão") allowing constitutional reforms to pass, the symbolic significance of a professor ascending to Presidency.

Regarding economic conditions, fiscal restrains implies that structural reform might be focused on organize what is already in place by a top-down legal/policy framework and some additional funding as a carrot to enable some local capacities and equalize regional differences. Reform might be gradual because there was no fiscal space to be disruptive. The end of "Tanzi Effect" on government expenditure under the Cardoso years make the structural reform only possible if federal transfers toward state/municipalities were based on a new specialized fund formed by marching tax income contributions coming from the federal and decentralizing unit – for instance, capturing 20% of value-added tax revenues imposed by the states on firms and 20% of property taxes imposed by municipalities on property owner, matching them in 2:1 ratio with federal fund and transferring these amount annually in favor each municipality and state according enrolment at primary and secondary education, respectively. After major inclusion of students into primary level (universalized in 2000), a wider fiscal space derived from commodities super cycle allowed Lula Administration (2003-2010) to purse more expensive policy objectives, such major investment in pre-school, improvement in flux and retainment at secondary level, pedagogical classroom-level learning evaluations and a massive expansion of 'mid-tier' post-secondary

education due declining premium for skilled labor and unionization, the rise of new middle class and improvements in secondary completion rates.

5.2. Agenda Setting Circumstances: perception, stakes, concerns and ideation

As mentioned before, **public perception** toward reform was positive. Education reform is somehow easy to sell – especially if narrative is more focused on the fairness of universal access to primary education than equality in access to tertiary. Under a politics-as-usual without strong popular pressures, policy priority under structural reform can be easily chosen. And it was: improve primary education access during Cardoso years; mitigate drop-out and get progress/flux (aka: continuous attending each level at the correct age) right.

Main concerns were focused on try to not disarticulate completely (not ideal, but useful) non-formal institutions (norms, habits, pacts, tacit alliances, decentralized knowledge, short-cuts, positive deviances) that have been making the system work – even underperforming – up to date. If top-down Weberian-style multi-level structural reforms adopt planning-and-control procedures that are too strict and tight, reformers at the top take the risk to dissolve those local elements that make "business-as-usual" if not even close to optimal, at least functional so far - including some patronage instrumental to gain support from the local political authority in charge operating under personalized-competitive setting. The challenge is reform structure preserving trust among agents under some new constrains on practices, leaving room for adaptation of national "best practices" into local "good-fits"

On the same token, when top-down Weberian-style multi-level structural reforms are comprehensive, they must necessarily be incremental - leaving some room to multiple principals and agents along the policy chain transmission **reorganize their micro-political and bureaucratic relationships** under a new more straight forward hierarchical structure and delegation practices and grant them some time to adapt to new service provision standards, vertical accountability reporting protocols, and performance metrics at local and school level. If comprehensive structural reforms fail, it goes average in some locations and fails in a bunch of other. Reformers at national level can always declare victory, retreat to business-as-usual and

blame local authorities for lack of capacity, political will or corruption. Fiscal and political stakes were (somehow) low because bureaucratic nature of the reform make it (somehow) easily reversible and central government's skin-in-the-game is vailed to the eyes of the public at great extent.

A great deal of importance must be dedicated to **ideation** – a point somehow missed when it comes to policy analysis [Fig. 5].

Ideation is very important to define policy responses. However, **ideation does not always emerge from the people**. When an institutional disruption point emerges – a civil unrest, the end of authoritarian regime, a major technological change or, even a natural catastrophe – **leadership can make the big difference**. If leadership is able to act sharply on this tipping points creating a vision of the future, crafting an inclusive narrative and frames to mobilize hopes towards a sort of Hirschman's tunnel effect, agency can reshape structure and "turn the corner", rerouting growth towards an inclusive trajectory – despite of the degree of institutional stickiness and path dependence [Boettke, Coyne and Lesson, 2008]. That was true in the end of South African apartheid, the fall of Berlin wall, or the end of hyperinflation in Brazil.

Political leadership is not much more than project a vision and help to build societal coalition to put that vision in place. The Spanish philosopher Ortega y Gasset once wrote "a man is, after all, himself and his origins". Agenda-setting during Cardoso years is in a great extend reflection of the President's personal experience. It's somehow easy to see how a son of a urban middle-class traditional family household in the rich South, perfectly capable to attend an elitist but public-military primary and secondary education at the affluent city of São Paulo in 40s-50s Brazil (still mainly rural), young polyglot sociologist graduated and tenured as professor at the best public university in the country, latter experiencing exile as an international technocrat at ECLAC in the center-left governed Chile and as a professor at intellectual effervescent University of Paris Nanterre campus on the edge of May 1968 movements will prioritize a top-down, elite-driven, technocratic-based, strong-commitment, comprehensive-scope, gradual-implemented structural reform of primary and secondary education sector — the same platforms responsible for its own social upward mobility. "Every kid in school" was the motto.

Nevertheless, the same Ortega y Gasset also wrote a second line: "a man is, after all, himself and its circumstances. When it comes the menu of redistributive policy options available, windows of opportunity

are key – specially in developing countries such Brazil. Despite of the monetary stabilization and the immediate virtuous effects on household income inequality attributed to the end of "inflationary tax", Cardoso years (1995-2002) are ones of deep fiscal restraint.

Narrow fiscal space implied redistribution policies must be carried out neither by huge investments in infrastructure to change living conditions of poor (for instance, health and sanitation) nor mainly by costly pro-poor cross-subsidies on public tariffs and/or cash transfers – but by a gradual governance reform of a redistributive system already in place. Primary and secondary education governance was not even close of a first-best or second-best choice for agenda-setting after episodes of elite renewal and macroeconomic crisis surpass when political elites expected to be served with new state rents to guarantee political stability. But the origins and the circumstances [Grindle, 2004] ended by – despite the odds – selecting the policy priority.

Same will occurs during Lula years (2003-2010). It's somehow easy to see how a son of a "campesino" household, grown by a single mother in the poor North, barely capable to attend primary school in rural hinterlands of 50s-60s Brazil (now becoming rapidly urban), forced to migrate to the affluent city of São Paulo to attend vocational school as secondary education, "graduated" as a blue-collar lathe operator and finally emerged as an pragmatic automotive industry's labor union leader will prioritize a shift toward a populist, clientelist, narrow-scoped, accelerated deregulation and expansion of supply and demand side policies regarding tertiary and vocational education reform – the later, the same platform responsible for its own social upward mobility; the former his unfulfilled dream. "Grant every Brazilian a degree" was the motto.

On the same token, circumstances matter beyond the origins. Lula years (1995-2002) are ones of large and growing fiscal space due to commodities super cycle and broad elite renewal due to rise of left-wing Workers Party (PT) to power. For a former "outsider" that represent not only an opportunity to be seized but a "must-do" to strength patronage with the "workers' movement" (party itself, labor unions, local communities, campesinos, low-ranked public officials, urban "colectivos" and left-wing Catholic Church), create clientelist relations with local authorities and political group across the country and grant sympathy and acceptance from affluent but suspicious business and cultural elites enthroned in São Paulo and Rio de Janeiro.

5.3. Policy Characteristics: conflict and resources

In the case of education, bureaucratic reforms led by Cardoso Administration do promote impact on large sectors because educational reforms were the main chapter of a broader administrative state reform playbook. However, as expected, impacts within education sector were (mostly) revealed many years after and were not readily visible to the public beyond families participating in school's board along many years. Compliance with new bureaucratic (standards, procedures, requirements, metrics) were differed due to recognition at the top of unavailable bureaucratic capacity at the bottom.

Most areas of conflict were related to strategic accommodation of patronage, clientelist and "street-level" practices. [Grindle, 2004; Lipsky, 1980] In one hand, these practices can erode reform and negatively affect sustainability – let's say, spectacularly, by engendering a corruption scandal covered by national press leading to Ministry resignation or unveiled under radar, by incentivize isomorphy mimicry at local level to move upward in national evaluation's ranking. On the other hand, these practices must be tolerated in some degree not only because technocrats in nation's capital desperately need support from a mayor in a small municipality in the Amazon, but because these "cabo sueltos" can revealed themselves sources of positive deviances, invention, adaptation and learning.

As Grindle (2004) pointed: "patronage systems are not synonymous with bad governance. Ministers and other high-level officials have the capacity to use their appointment power to attract highly qualified staffs to carry out specific policy initiative. Managers with discretion over hiring have significant opportunities to create island of excellence (...). Discretion in hiring can provide means for escaping the rigidity. The problem is their instability and politization (...) undermining the public purpose of the government. The fatal weakness of patronage systems is that they are capricious, not that they are inevitable incompetent"

In this sense, Cardoso Administration used patronage discretion at national level to advance their "managed revolution" aiming to mitigate politization and clientelist practices at local level.

In the case of Brazil, **3 (three) main areas of conflict** related with education governance were anticipated: (a) principal's election at school-level, (b) teacher's hiring and training at municipal level, (c) migration

of primary (mostly) and secondary students from state-level to municipal-level.

Principal's election opposes reformers against state governors and municipal interests as those appointments are highly politically desirable. Principals interacts intensively with student's families (aka: voters) and manage school's priorities, funds and infrastructure improvements with a great deal of discretionary. Local political parties are prone to election but against capacity test and periodic evaluation of principal's performance. In sum, conflicts are organized around the fact that schools can be used by mayors and principals both as electoral platforms and rents assignation platforms.

In the case of Brazil, in other to preserve support at local level, reformers at the top let the local state and municipal authorities choose they own modality of principal's selection: election by popular vote, political appointment, public tender or pro-bono. However, in some municipalities, social oversight at local level create pressure toward the usage of the "pedagogical" performance criteria recommended: candidates to school's principal position must be former teacher with good reputation within the municipal school's regional network. Some of the municipalities went further, deciding on separation of functions: a school's director responsible to manage service provision management and a pedagogical coordinator responsible improve learning outcomes.

Teacher's hiring process opposes reformers against mayors, principals and teacher's union. Teachers unions are contrary to hiring by public tender. However, union are somehow weak at municipal level because teacher strongly preferred to work in schools that contracted them as a federal employee – a new type of contract introduced by the reform. Despite of earning same wages and subject towards same hiring conditions, new hiring modality generates status inequality among "first-tier" (as federal employees) and "second-tier" (local employees) teachers. Federalization of some contracts transfer power from local unions to national ones. Union remains strong in metropolitan areas (primary school's teachers) and statelevel (secondary school's teacher) but bargain power is considerable reduce when key features of hiring process are conditionalities coming from the national. Teacher's training provision opposes reformers and federal universities in one side, and local authorities on the others: local politicians prefer to hire private local consultants that provide tailor-made classroom-centered solutions. Technocrats in alliance with federal universities prefer to have teacher's completing undergraduate and graduate-level degrees to acquire general theoretical and management knowledge.

Once again, despite their bias towards training delivered by federal universities and under the supervision of Ministry of Education, reformers tolerated "constrained patronage and clientelism", letting solutions to emerge from local politics dynamics to avoid conflict or veiled sabotage of reforming efforts at local level.

Finally, structural reforms focused on institutional strengthening of municipalities at the bottom of administrative capacity pyramid has potential to oppose governors and mayors and create rivalries among principals as they compete for federal funds allocated proportionally to student's enrolments rates and school/students' performance at national standardized test.

These conflicts and another focus of resistance were overcome — with great degree of tolerance and accommodation — due to dependence of support from regional political elites. Sticks and carrots were many: **tight conditionalities** attached to federal transfers as a substitute of hierarchical authority, open permanent mechanism to build **consensus on the appropriate timing and pace of compliance with new "order-of-the-business"**, creating incentives to align interest along multi-level bureaucracy and nudge behaviors on **demand-side horizontal governance schemes** (such as "Comités Municipais de Acompanhameto") and strengthening administrative capacity at local level with funds, training, mentoring, coaching and a mosaic of technical cooperation assistance programs — some of them supported by international universities and multilateral agencies.

6. "The Managed Revolution" in Education: orientation, policy programs and results

6.1. Orientation: pro and cons

The main feature of primary and secondary education reform in Brazil (1995-2010) was a gradual implementation along Weberian-style approach (hierarchical, rule-governed decision-making, functional specialization, meritocratic recruitment and promotion with predictable, rewarding, long-term careers combining rigidity on structure and New Public Management-style flexibility on agency. In theory, that solves the principal-agent misalignment within the education service provision (supply-side) and provide opportunities of social oversight for watchdog organizations, communities and families. Provider can be either public or private firms working on contract – but just after public bidding supervised by the Judiciary and agreed up-front on performance targets. A system of incentives was put in place to reward

for early achieving results and penalties for falling short – all of them linked to direct transfers to school's account. Monitoring and evaluation – both in outputs and outcomes – provides an empirical basis for assessing and compare performance across similar organizations.

NPM style mechanism as these mentioned above can be useful but they are not the Holy Grail when it comes to policy and governance reform. Time and resource consuming frequent reporting (data gathering, consolidation, submission, verification, auditing, interpretation and feedback) rise transaction costs. Incentives attached to rankings are invitations to copy-and-paste organization charts, management procedures, contracts (isomorphic mimicry) and even pedagogical techniques without considering content and results at specific context, feeding a "let's pretend" strategy

6.2. Policy initiatives

The structural reform of primary and secondary education took form in a wide set of programs focusing school's modernization, students' performance and family/community engagement. The main 7 (seven) initiatives are detailed bellow:

[1] Approval of "Ley de Diretizes de Base da Educação – LDBE" (1996), the first comprehensive national legal framework structuring the national education system, establishing general governance principles, reorganizing educational levels and modalities, distributing mandates and funds across federal, state and municipalities in devolution and – finally creating a brand-new civil service regime targeting all public education personnel (teacher, officers, administrative assistants).

[2] Creation of Fundo Nacional de Desenvolvimento da Educação Fundamental - FUNDEF (1996), replaced by a boosted version FUNDEB (2007): a federal fund governed by public-private deliberative board and managed by Ministry of Education with the objective to (a) universalize access (100%) and enrolment (95% of due to attrition) in primary education by 2000 and (b) supplement municipal budget with federal transfers to structure supply accordingly with minimal quality standards and input flexibility including: facilities modernization, personnel (from teachers to temporary workers), transportation, textbooks, lab supplies and other pedagogical materials; meals and petty-cash for daily "out-of-the-pocket" expenses. FUNDEF was capitalize with Ministry of Education's budget (10%) and a basket fund

of state-level (50%) and municipal level (40%) tax revenues and redistributed regionally accordingly primary enrolment per school and, lately with the establishment of FUNDEB during Lula Administration, accordingly to school's performance indicators. Federal funds are transfer directly to school's account to avoid political intermediation. Principals and front-line school managers gained degree of autonomy in allocating inputs and contracting providers in a framework that ensured effectiveness and probity in how the resources are used – hold themselves not only vertically accountable to reformers at the top and citizen at last mile. Principles became accountable to "Conselhos Municipais de Acompanhamento". CMAs have a say in funds allocation – similar to participatory budget experiences – and in approval of quarterly reports sent to Ministry of Education. In 2007, FUNDEF was expanded to cover nursery, pre-school and secondary education, aiming to be an equalizer of initial conditions and a policy instrument to reduce drop-out rates at secondary level that had been impairing progress toward better indicator of secondary education attainments. Renamed as "Fundo Nacional para o Desenvolimento da Educação Básica" (2007), the fund mirrored FUNDEF experiences and applied the same combination of stick-and-carrot incentives, asset allocation autonomy under incomplete devolution with ambitious primary access goals – coverage of 50% of the total demand on nursery (0-3 years) and universalization of pre-school (4-5y) including literacy by 2017 – and not so ambitious secondary retainment goals: a 20% reduction in drop- out rates by 2016. Due to early pedagogical engagement with toddler's socio-emotional abilities, kids enter the primary school knowing basic rules of convivence and socialization in tiny groups, adherence of school's routines as sign of good behavior and some basic cognitions such as sizes and colors. Focused on supply-side conditions, FUNDEB receive valuable support from demand-side targeted cash transfers to strength school attendance and retainment.

[3] Created in 2001, the "Bolsa Educação" program was a conditional cash transfer from federal government to poor households across the country to mitigate demand-side constrains to regular school attendance – from the opportunity cost of child labor to school uniform. Transfer were calibrated according to income and number of 4-16-year-old children at the household. Conditionalities were a minimum of 85% school attendance and being strictly update with immunization calendar. Fund are transferred direct to a beneficiaries' checking account opened for this very purpose to avoid local politicians tapping into funds. However, registration of beneficiary families is managed by Social Development Department in coordination with Education Departments at municipal, requiring constant horizontal coordination between the two. The benefit was integrated with similar transfers into a sole program called "Bolsa"

Família" during the first years of Lula Administration.

- [4] "Censo Nacional da Educação Básica" (1995) is an annual national census covering pre-school, primary and secondary school and gathering data on schools, teachers and students to identify supply-side gaps and demand-side inequalities among participating schools. The census replaced sample-based surveys of the past and allow corrective actions on transfers allocation in the following year. The census is carried out by Ministry of Education in cooperation with state-level and municipal-level education departments. Due to its declaratory nature and absence of regular auditing, local authorities tend to over-report students' enrollments and under-report supply-side service provision components. Data is consolidated in a multi-criteria balance score card-type set of composite indicators to measure "quality" in education at school level.
- [5] "Indicadores de Desarrollo da Educação Básica" IDEB (2007) is sole result-based indicator that became the most important metric to measure school's performance on learning across the country. The index consider approval rate and national standardized tests results of student in each level in each school. IDEB scores are useful in a way that offers a results-based comparative metric. Evaluation and monitoring by a composite indicator have the advantage of revealing outliers states or municipalities thriving despite the socio-economic conditions and triggering detailed field studies focused on local practices positive deviances that generates superior performance that can be piloted in other locations and inform laggards catchup efforts. It also creates positive rivalry among municipalities in the same meso geographical region triggering competition for new enrolments based on IDEB results more students, higher transfers.
- [6] New "Sistema de Avaliação da Educação Básica SAEB (1995)" is a set of 5 (five) standardized exams among them Prova Brasil (primary and secondary) and ENEM (at secondary completion) to measure student's learning at school level. Exams are applied universally to students enrolled at primary and secondary schools. Some of them are considering in admissions to tertiary education.
- [7] Base Nacional Curricular (BNC) is a national guideline that establish contents and desirable learning outcomes at the end of each year for students attending primary and secondary schools. The pedagogical guideline includes: (a) actions to be take in the classroom to develop student's socio-emotional soft skill, b) review of practices to make school more attractive to teenagers and, finally (c) recommendations of

specific to engage families and communities with school life after school day and during the weekends.

[8] New "Programa Nacional do Livro Didático" (1998): the program evaluate textbooks contents across the country in order to avoid differences of treatment in political sensitive issues such as ethnicity and gender across the country. Textbook choices are made at teachers/school level, but purchase is integrated to obtain better prices and create constrains to rent seeking at local level.

[9] 'Programa Nacional de Aprendizagem na Idade Certa' (2009): inspired by an experience emerged in Sobral, CE as a distinguish pedagogical feature of its sharp raising to IDEB top-ranked positions. PNAIC is a pedagogical experimentation program aiming to reduce repetition and harmonize progress, attainment and learning along every step of student's educational journey – in sum, having every student learning appropriate contents, attending appropriate year/level at appropriate age.

6.3. Results:

After 25 years of its beginning, **The Managed Revolution results are outstanding**. Improvements can be observed in almost every demand-side outcome indicator: **broader access**, **higher attainment**, **better flux and improved performance**. Moreover, **indicators trajectory seems robust**: resilient to economic shocks occurred during the period and showing low volatiles. That "well-behave" monotonic improvement is one of the sources of momentum – a key attribute for success of structural, comprehensive, long-term reforms.

Nevertheless, a precautionary note on attribution is needed at this point. In all cases – but particularly in the multi-level, top-down, multiple principals, multiple agents, gradual and flexible Brazilian reform – **it's difficult to establish clear causation between supply-side inputs and demand-side outcomes**. It's equally difficult to estimate the role of demand-side governance schemes ("the role of grassroots", in plain English) over student's performance. That might work by comparative field case-studies at school's level affected by the same ecology. Finally, – but not exhaustively – it's difficult to attribute student's performance outcomes – or even, learning outcomes – to school's quality without considering what seems to be more relevant effects coming from ecological and household factors associated with multidimensional poverty and – even more important according to some experts – "soft factors" such

parenting styles, socio-emotional conditions at home and peer-effects among friends and schoolmates.

Having disclaimer that, a brief summary on "The Managed Revolution" on **demand-side outcomes** indicators is presented below:

- [1] Access and enrollment: top-down reforms universalized access to primary education and raise enrollment averages above to 100% at secondary level [Fig. 06] creating pressure for broader expansion of access art. Municipalization of primary education empowered small cities in the hinterlands of the country, brought schools conveniently near (physically and psychologically) to student's household reducing the effects of transportation services disruption and cost on regular attendance. Strong municipalization at primary level creates incentives to have principals selected within the community [Fig. 07]. Have them living next door it is the easiest way to hold them accountable. Beyond national standards and conditionality, primary and secondary education is a community-based business by nature and must be governed under subsidiarity principles. FUNDEF/FUNDEB stick-and-carrot approach made service delivery at local level possible.
- [2] **Attainment**: education attainment gradually improved for every cycle from 1993 to 2009. Secondary completion jumped from 11% of total population to 32% in 2009 [Fig. 08]. Moreover, higher educational attainments are producing higher intergenerational mobility: **students are acquiring more years of schooling than their parents** [Fig. 09]. Finally, regional disparities in educational attainment are declining [Fig. 10].
- [3] Flux (dropout and repetition rates): flux is not directly measured by INEP/SAEB metrics, but improvements in attainment is a proxy to estimate drops in repetition rates. Bruns, Evans and Luque (2011) have recognized advancements on progress: "high repetition is inefficient not only because it wastes students' time and system resources but also because it contributes to higher dropout rates. Approximately 30 percent of Brazilian students drop out before completing primary school, after having stayed in school for 11 years on average—more than enough time to complete the eight-year primary cycle if they do not repeat grades. Approximately 25 percent of secondary students drop out before graduating, after having spent four years trying to complete the three-year cycle. Indeed, more than 15 percent of students in Brazil are over 25 years old when they complete secondary school.

No other country in the OECD survey has anything close to this extent of age-grade distortion. Brazil's high rates of dropout and repetition contribute to greatly elevated costs per graduate".

[4] **Performance**: primary and secondary students have been performing gradually better in all national standardized test (i.e., "Provinha Brasil", "Prova Brasil" and "Exame Nacional do Ensino Médio", all universally applied to student's population). Some discrete improvement in SAEB math test [Fig.11] and PISA math and science tests [Fig. 12]. **Huge gaps between Brazil and developed countries remains**. After the implementation of FUNDEB's new focus on pre-school, **expansion of public services on nursery**, **kindergarten and literacy at municipal level had a huge spillover effect on primary level learning outcomes** – especially after 2014.

7. "The Managed Revolution": puzzles, panaceas and mirages

Multi-level governance reforms are plenty of **principal-agent problems**. Alignment between interest of principal and agent are desirable, but tight control is not the best way to obtain it.

Bureaucracies do have internal management structures and control systems that align staff efforts with organizational goals and monitor how financial and human resources are used in delivering on top priorities. Mechanisms for monitoring the behavior of agents, and enforcing if non-compliance are key but must be calibrated not too tight, in a way to: (a) not loose collaboration and political support in personalized competitive settings, allowing some degree of patronage and clientelism, (b) allow some degree of autonomy in asset allocation at local level to permit local political authorities renew their legitimacy by open public decision to citizen's participation and (c) leave some room for emergence of "good-fits" by invention, adaptation, responsible experimentation, service customization and continuous learning about school management practices, local governance schemes and in-classroom pedagogical experimentation.

Impersonal rules imposed by imposed rigidity (redundance, on purpose) of tight controls do not necessarily offer higher returns on performance because human action is primarily drive by loyalty, identity, reputation, reciprocity, peer-pressure and so on – not only by authority or coercion.

As Wilson (1989) put it: "All good managers know that it is ultimately the informal norms and group

identities that will most strongly motivate the workers in an organization to do their best (...). Social capital thus substitutes for elaborate formal incentive systems (...) Managers spend much more time on cultivating the right 'organizational culture' than on fixing the formal lines of authority (...)"

When chain of accountability is longer and more circuitous, non-compliance and deviance are more frequent and responsibilities are difficult to individualize because networks of principals, agents and stakeholders are not stable throughout time. Nevertheless, neither non-compliance nor deviance are totally bad: the last can result in innovation and the former can be just signaling capacity gaps to be addressed or unnecessary procedures to be simplified.

Open governance mechanisms – specially transparency and participation – can hold local political leaders accountable for following through reform priorities, but multi-level policy implementation always permit those in charge at the bottom blame those in charge above for misfortunes and malpractices at local level. Double down on controls is not the best way to nudge compliance [Fig. 13].

7.1. The puzzle on "quality" and "performance"

Previously to reform, incentives made the somehow fuzzy concept of "quality" equivalent to a user-friendly easily measured concept of "performance". Under a results-based management and rewarding system, taken student's results in national standardized tests as a "proxy" to evaluate the quality of educational services provided by a specific school create an undesirable byproduct: a strong incentive to teach for pass the test, not to learn. When rankings became more important than knowledge, learning turns into to training.

Nevertheless, the quality-performance puzzle is deeper. Literature and empirical evidence show **student's performance depends slightly on school's quality**. When it comes to primary and secondary education, students in wealthy countries obtain vastly higher test scores than those in developing ones. Wealth of a country affects exam results just as much as the wealth of a student's household does [Patel, Sanderful

2020]. As a consequence, it's increasingly apparent that performance gaps by social class take root in the earliest years of children's' lives and fail to narrow in the years that follow [Garcia, Weiss 2017]

Among nationals of the same country, children who frequent change schools due to poor housing; have little help with homework; have feu role models of success; have more exposure to lead and asbestos; have untreated vision, ear, dental or other health problems; a live in a chaotic and frequently unsafe environment. Multiple studies have found that only 20% percent of student's performance outcomes can be attributed to schooling, whereas about 60 percent are explained by family circumstances [Hanauer, 2019]. It's fair to expect that geographical ecology and physical and psychological safety of kids at household matter even more in developing and more unequal societies.

Nevertheless, quality must be considered in terms that are represented by the social gains achieved as a result of the universalization of basic education and not only from the marks obtained by the pupils in national and international standardized tests, such as those considered under the Basic Education Development Index (IDEB) led by INEP. [Marchelli, 2010]

7.2. The puzzle between "inequality" and/or "fairness"

Educational inequality is one of the main problems that allow persistence of abysmal social disparities faced by Brazilian population along time. Despite illiteracy rate reduction since early mid-80s, a large number of illiterates – around 7% of the population - still exist. Despite the universalization of primary education in 2000, access to nursery/pre-school (0-6 years old) and reduction of secondary school's dropout rates are still wanting to be addressed. In all levels (nursery/pre-school, primary and secondary), data present very unequal patterns of access, attendance and performance across different regional of Brasil [Castro, 2009].

Ideas matter a lot when it come to understand different degree of tolerance regarding educational opportunities and outcomes. Despite of immense concern about economic inequality in policy debate, recently research shows people prefer unequal societies, if equalization compromises fairness. When people are asked to distribute resources among a small group of people in a lab study, they insist on an

exactly equal distribution. However, when people are asked to distribute resources among a large group of people in the actual world, they reject an equal distribution and prefer a certain extent of inequality – maybe to accommodate fairness [Starmans, Sheskin and Bloom, 2017].

As discussed before, this "fairness-first equality-later" effect contaminates the political economy of educational reform: elites allow reform to occur the in favor in a way they preserve small group advantages and reform used to be elite-driven. That result in a top-down elite-driven education reform where inclusive response is driven by broader access (inclusion), but not by same pedagogical conditions (quality). Differences in education attainment are the perceived as fair – and justified – on different digress of effort and meritocracy

7.3. The civic-engagement panacea

Effective governance in democratic society requires that both the policy-making process and its outcomes are regarded as fair by the public. Ultimately, governance is there to produce -if not equality – at least, fairness.

In policy reforms conducted under hierarchical and tight planning and control approach, common sense often explains the redemption of unlikely high-performers outliers as coming from a sort of special change-making energy coming from virtuous forms of civic engagement schemes at local level that makes all the difference. When power, interest and incentives fall short in explain positive deviances, governance shows up as the "secret sauce"

There are no doubts that civic-engagement matters. Public servants in charge to deliver public services at the last-mile can be pressured vertically by top-down conditionalities and horizontal oversight in a sort of "sandwich" strategy. If channeled to appropriate channels, civic networks of angry and hope [Castells, 2012] can be instrumental for advance policy reforms that impose concrete costs over political (but powerful) minorities in favor of uncertain benefits to be shared by silent social majorities in the future [Olson, 1965 and Baudrillard, 2004].

Notwithstanding, civic engagement (or "open governance" as OECD glossary) claims of providing governance's "magic touch" are somehow overstated and depends on attention, motivation, interest, energy and capacity of stakeholders involved. [Fig. 14]

Transparency is push by corruption, but open data must be accurate, intelligible, update, fungible, relevant and auditable. Access to information must be smooth. Accountability is a double-side sword: last mile service provider is not willing to compromise with delivery outcomes – when inputs are down streamed under tight controls.

Participation in decision regarding primary and secondary education has potential to bring tacit and context-relevant knowledge to inform adaptation of policy standards to local level. Consultation with interest groups may also lead to more inclusive and legitimate policy choices – but not necessarily to a "better" policy. In the name of closeness, policymakers might only consult a selected set of geographically limited interest ("constituencies") that push them to pursue "special interest", thereby generating public discontent with political decisions. Moreover, informed participation in complex, technocratic-style decisions demands that citizens are capable to understand trade-offs, limitations, unintended consequences associated with a policy choice. If participation space is narrowed to include just competing vested interest of qualified interest groups, the quality of decision maybe rises – sometimes at the expense of a broad legitimacy. But risk of capturing is elevated as well.

Government-community collaboration in open education supporting service at last mile (such as parents serving school meals, volunteers joining community task forces to rebuild schools' facilities, families organizing book clubs and so on) are substitutes of supply-side gaps in some poor municipalities. When collaboration requires scale and an army of NGOs, consultants, do-thanks became involved, risk of rent-seeking and free-riding are higher.

Meaningful engagement of parents and communities strongly depends on previous presence of a charismatic leader, a strong civic cloth and – in some cases – a tipping point of tragedy and redemption in recent history that mobilize awareness, impose a moral obligation to avoid indifference and transform frustration and/or angry into energy.

The experience of Brazilian primary and secondary education governance reform is mixed. Paradoxical as it can sound; parents are not (at least initially) necessarily interested in school's performance. Opportunity cost of additional income is relevant on the urban secondary level – substitute effect between school and work on the interested of the family and the student. Actually, low-income and physically, emotionally exhausted parents are initially worried about their pupils being feed ("one less meal to buy and prepare"), secure ("protected from gangs' bad influence) and disciplined by teachers and uniform. In low-income communities, being a student is regarded as a positive social identity. Parents competes to enroll teenagers at better public secondary schools within school district and at nearest nursery and primary school due toddlers and children dependency of a tutor to be drop by at school gate every weekday morning. When performance is bad, parents prefers to move kids from next nearest primary school than engage in improvements. Interest in school's performance rises as performance rises. In general terms, parents are more engaged when performance grant their kid comparative advantages derived from reputation and credentialism. In these positive setting of runner ups, parents play a crucial role in organizing extracurricular activities in afterhours, such as book clubs, theater plays and sports competition. [Cruz, 2020].

Experience with school boards' oversight is somehow positive. During the first years of Cardoso Administration, school's budget execution managed by school's board was oversighted by communitarian bodies composed by local NGOS, social movements, catholic churches and several civil society bodies. The creation of a monitoring and evaluation apparatus (IDEB, SAEB, PNIAC) and the universalization of the supply-side / demand-side census took place in the first years of Lula Administration replaced the community check provide by the "Comités Municipais de Acompanhamiento - CMAs" with bureaucratic controls, gradually undermining the role of CMAs in checking-and-balancing school's board priorities focused on infrastructure with community interest focused on student's learning. More than 1300 CMAs were active in 2002. By the end of 2010, virtually all of them had been demobilized.

Finally, collaborative spirits of teachers' unions strongly depend on local context. Generally speaking, municipalization of service provision at primary level and introduction of public-private partnership between municipalities and teachers' cooperatives under performance agreements gradually diminished union's bargain power in comparison with 70s-80s. As a veto player, is always recommended to have

them at least informed, preferably co-designing and if possible, fully on board in structural reforms. Communication is crucial because unions are prone to status quo bias, group thinking and insider-outside dynamics when facing uncertainty.

7.4. The mirage of the "secret sauce": the case of Sobral, CE

What is the "secret sauce" of outliers when it comes to student's performance? What is the lesson to be learn from underdogs that were able to bridge the gap despite the odds? Is this sauce can be cooked in other kitchens? Is that special taste can be attributed to ingredients, receipt, chef's cooking skills, good humors of the convivial or some mysterious "feel-good-effect"? Is superior performance a matter of merit or luck? Can merit be attributed to school personnel or local political dynamics?

Sobral is a city of 200,000 inhabitants in the poor Northern state of Ceará (CE). In 2005, the municipality was ranked # 1234 among more than 5,000 municipalities in Brazil regarding "quality of basic education" measured by 5th grade IDEB score 2005 = 4.0 – slightly above the average of all other Brazilians state-level schools. Just 8 years afterwards, the city of Sobral had managed to have the best primary and lower secondary public education system in Brazil – well above the average of its private peers (5th grade IDEB score 2013 = 7.8). [Fig. 15]. How?

This impressive transformation has been documented since 2007. More recently, successful innovative pedagogical practices and governance schemes has been transferred to be tested as a potential "good-fits" to other municipal and state-level basic education systems. Some of Sobral's born experiences has informed new national level programs led the Ministry of Education targeting new educational goals for all primary/secondary systems across the country [Cruz and Loureiro 2020]. An (brief) inventory of these practices and lessons are presented below:

(a) Local leadership matter: the municipality placed education at the top of public agenda and kept it out of politics. That does not mean to ignore political settlements but create minimum consensus on educational goals and seize the opportunity of a 23 years of political elite stability across 8 different electoral cycles.

- (b) Public entrepreneurs are key: education champions matter not only to move things forward, putting together virtuous alliance and transforming potential conflicts, but mostly to create psychological safety environments to experiment systematically and sometimes fail in classroom.
- (c) Accountability can be used as a learning mechanism: Sobral's systematically contracted external evaluation since 2001 well before IDEB balanced-score card and evaluation mechanisms became effective in 2007.
- (d) Tipping points are crucial to gain momentum and (re)build public trust. The rise of Sobral's performance coincides with an anecdotical fact: a very good friend of the mayor was not appointed as largest municipal primary school because he did not pass a pedagogical capacity test even when test was not a mandatory requirement in selection process.
- (e) Simple, easy-to-communicate, user-centered focus, results-based metrics can mobilize efforts in a form of collective challenge. The distinguish feature of Sobral experience is the adoption of a simple last-mile result-oriented metric: every student must complete lower secondary education at the right age and with appropriate learning. This clear intermediate metric implies short feedback loops to learn and adapt and enable minor and frequent corrections along the trajectory, reducing volatility and loss of momentum [Pritchet, Andrews and Wollock, 2017].
- (f) Adoption of a problem-driven interactive approach (PDIA) or a "foot in the class" ("pé na sala de aula"): 2-week cycle check-ins with teachers of every functional specialization to collectively prepare study plans for the next 2 weeks, facilitated by an expert of Education Department. Rapid feedback loops to learn and progress metrics focused on learning not content delivery. The pedagogical practice led to termination of multi-serial classroom, requiring additional investment on school's facilities.
- (g) Public private-partnerships and private sector collaboration: presence of private consulting firms (such as Liceum Educational) and technical cooperation programs with national and international universities to use Sobral system as sandbox for behavioral-informed field experiments.
- (h) Creation of "Programa de Aprendizagem na Idade Certa" to tackle with delays in progress/flux and repetition rates. Sobral's PAIC inspired the launch of similar program at national level.
- (i) Effective use of student assessment, focused curriculum with a clear learning sequency and periodization of foundational (socio-emotional skills) imparted by systematic learn-by-doing training focus.

- (j) Autonomy of day-by-day management, combined with vertically accountable to national/regional authorities and more important horizontally, across the municipal system and civil society (sandwich approach)
- (k) Municipals schools' principals appointed by a meritocratic selection process, leaving process to be designed by school's board of each unit.
- (l) Teachers' training focus on "learning science", not on academic credentials: development of own pedagogical materials and methods.

In sum, the key lesson coming out from Sobral experience rest in virtuous combination of compliance with national standards managed by public servants (directors, principals, teachers), smart supply-side adaptation leading by context-relevant in-class experimentation conducted with support of interinstitutional alliances (international NGOS, academia, multilateral agencies) boosted by demand-side pressure (parents, local press). The secret sauce is one of many condiments – and a few doses of luck – all of them focusing on the student's learning experience [Fig. 16].

8. Conclusion: getting governance reform right

The "Managed Revolution" (1995-2010) transformed Brazilian primary and secondary education from a fragmented chaos in a fragmented – but integrated – system. Besides system better performance in "process students and improve their learning", students can now move across the schools without major disruption in attainment and performance. Students' performance still strongly depends on their place of living, but laggards' municipalities are bridging the gap and catching up with the vanguard.

Considering the case of Sobral, it's hard to answer why some municipalities perform better than the other: best secret sauces are homemade ones. Nevertheless, it's clear that some ingredients are key: political stability and compromise at local level (political authority), the agency of reform champions at school level (public entrepreneurs), priority to in-classroom improvements focus on student's experience (user-centered), compliance with national standards, responsible experimentation at local level to learn context-relevant lessons (problem-driven approach) and – fingers-crossed – a civic environment prone to engage in collaborative design of solutions.

On the same token, it's hard to stablish clear causation chain between big features of education governance reform at system improvement. Much of the later could be explained simply by demographics dynamics or the 25 years of (relative) economic bonanza in terms of macroeconomic stabilization, economic growth and social inclusion throughout other more immediate means such as income redistribution.

Despite of that, some useful lessons regarding how to get governance right in structural reforms in developing countries remains:

- [1] Inclusive responses such as broader access to education does not means necessarily better income distribution. In developing countries, reforms focusing on inclusion let's say "equality of opportunity" are more likely to flourish than other focused on equality. In education realm, elites want to protect their educational credentials that grant the wage premiums and the social capital derived from being socialized by an elitist education system. And the general public let's say "public opinion" seems matter more about fairness (considering effort and merit) than justice (considering the right of having equal outcomes).
- [2] Agenda-setting is complex depending on conditions, timing, competition between priorities, degree of freedoms to choose, enforcement and management capacity. What is interesting to observe is the centrality of leaders' preferences (sometimes based on his/her own life experiences and world views) in hand-picking priorities as his personal feelings indicates. While structural reforms design and implementation is very often technocratic, choice can be counterintuitively a great deal of personalism. That makes structural reform a communication challenge at first. And bring problem framing to the top of skills' set require putting this kind of reform in motion: connect, convince and communicate benefits not to all, but to each one.
- [3] Structural change is welcome if and just if does not ask elites to pay for the cost at least, not in the short run. Period.
- [4] Structural reforms desperately need a *grand entrance*. Big change must come first to size political capital granted by a fresh start the "first 100 days" as spin doctors and political junkies say. Authority

and enforcement have diminishing returns on scale and decreasing marginal utility. In the case of Brazil, Cardoso Administration and – afterwards – Lula's were able to tap on this "fresh start" public humor and moved quickly.

- [5] Comprehensive type of reforms are costly but has **economies of scale and scope**. If you have political power, go structural and comprehensive but gradual. In the case of Brazil, **reforms objectives were phase out**: access to primary education first; student's retainment second; then secondary level and preschool after that. Participation of municipalities were voluntary at first. In the mid-run, the "new normal" experienced by peers in other latitudes imposes itself by gravity.
- [6] There is a **big difference in reform a system and put a system in place over chaos**. "The Managed Revolution" case fits in the second. Put a system in place is necessarily ambitious, comprehensive and depends on incremental change. That's the nature of the systems after all.
- [7] When reformers aim to put a brand-new system in place, **focus must go to structure besides agency**. The former can shape the latter if and just if: (a) a narrative is crafted to influence attitudes of opposite or mobilize huge alliances that intimidates them, (b) a stick-and-carrot incentives system is designed to nudge behavior of skeptical toward new standards and (c) centralized reform can really generously delivery on carrots (fiscal resources, transfers, capacity building towards local level) and are smart to manage the stick softly.
- [8] Manage stick softly means reformers must grant degrees of freedom to agency at local level. Reason are trifold: (a) human conduct take time to reshape and its prone of status quo, grouping thinking and confirmation bias; (b) preserve local elite power is key to grant political continuity and avoid "let's pretend strategies" in a decentralized system and (c) give room to emerge of local inventions and context-relevant "good-fits" is tremendously useful to improve system's structure by enabling auto-correction. That's (partially) solve the paradox of collective learning of decentralized knowledge in fragmented systems.
- [9] Governing local agency from the above is tricky. Actors can favor or oppose reforms depending not only on the constituencies' interests or narrative frames coming from the above but on the

position taken by political adversaries and rival groups at local level. That's why Cardoso Administration put strong emphasis in working with mayors elected for 4 years-terms in 1993 - despite of their political parties. Once 1988 Constitution had allowed incumbents to run for a second 4-year term, that give reformers not only leverage but a real opportunity to work with incumbents up to 2000 – the year to deliver the "All kids in school" goal. In some municipalities, teachers' unions were politically aligned with the mayor, favoring reforms. In others, local alliance feels apart – but incumbents prevailed. The effect of local politics dynamics in primary school's student's performance is illustrated by a panel of micro case-studies by [Amaral, 2017]

- [7] Reformers need to produce **early victories** to maintain momentum and **serve politicians with good news to have them sell it by the public opinion trough the press**. That's a necessary condition to reauthorize functional progress and renovate political support for the next move. If "All kids in (primary) school by the new millennial" motto would had failed by the 2000, maybe the "managed revolution" would have collapsed.
- [8] To have all parts of the system working together, some degree of charismatic leadership such as Cardoso's or Lula's, in each singular style is required. As in an orchestra, leadership does not mean take the lead all times. Actually, political leadership is not much more than the art of projecting a vision and crafting inspiring narratives that creates sustainable "tunnel's effects" among the public and let protagonists roles change among lead reformers one at a time. Leadership is creating ideation, project a vision and create alliances to bring us there. Way, means, rhythm must be delegate not without supervise to technocrats. Trust, but verify.
- [9] Structural reforms is about **second-bests**, **good-enough**, **muddling-trough solutions**. In some cases, tolerate "let's pretend strategies" (isomorphic mimicry, in a fancier way) can be a good way of gradually break resistance against real reform. Sometimes, skeptical officers must "play with mocking versions of the new normal" to became aware these are better and politically safe way of doing business.
- [10] As Sobral's experience shows, high-performance results came (mostly) from **positive deviance derived from freedom of agency** not from structure. That does not mean top-down structure as the one put in place by Brazilian reformers were useless. Actually, there is nothing more useful to enable smart

agency than **coaching effects provided by "structure"** elements: constrains, goals, incentives, control, metrics, rewards, feedback and – of course – a small dose of punishment.

- [12] Civic engagement is capricious. High doses can result in immobilism, small doses can result in apathy. Transparency can be mimicked, participation can result in capture, collaboration can lead to rent-seeking. Or can be tremendously useful to provide check, ideas, support and energy needed in big changes.
- [13] Beyond all reasons that push structural reforms forward, the reasons of the heart's leaders prevail. **Something heroic in that kind of endeavor is perceived only by insiders**. This sense of mission makes them capable to go beyond and put higher stake at risk not for the redemption of the beneficiaries, but for the redemption of the group. This somehow elitist sense of "predestination" among small group of Cardoso's nearest collaborators is brilliant documented by Fiuza (2006). Redemption matters even when it sounds an exaggeration. As popular Brazilian lyrics put it: "Sometimes you have touched the low, to see the starts in the skies and dream big".

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Annex 1- Figures and Tables

1200 #2: Dominant Dominant Rule-by-law #1: Discretionary Dominant Conflict **Political** #6: Settlement Sustainable Democracy #3: Competitive Personalized Rule-of-law Competitive C Competitive High: Low: Organizational and impersonality Personalized institutional complexity elite bargain

Fig. 01 – Development Typology – Brazil Erratic Trajectory



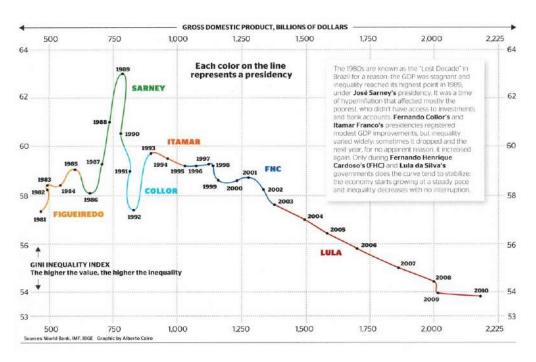


Fig. 03 – "The Managed Revolution" Challenge: impersonal rule-based reform for a personalized competitive setting

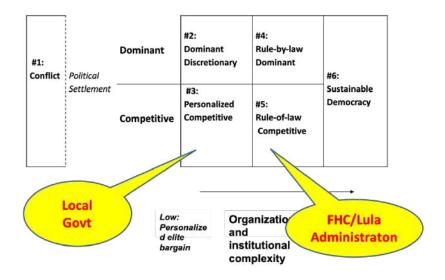


Fig. 04 – The Political Economy of Policy Reform: context, agenda-setting and policy

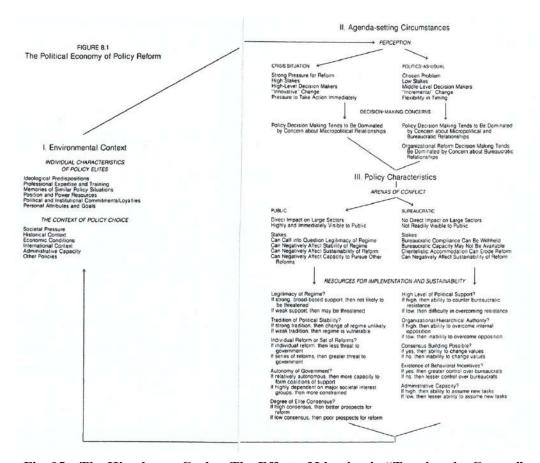


Fig. 05 – The Hirschman Cycle – The Effect of Ideation in "Turning the Corner"

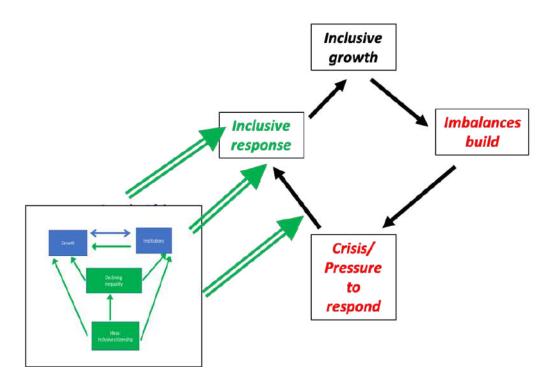


Fig. 06 - Pressures over Secondary-Level

Table 2. Secondary Education Gross Enrollment Ratio in Selected Countries, 1990–2008

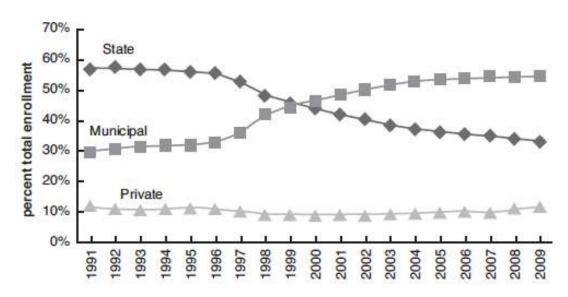
(total students enrolled as percentage of the relevant age group)

	1990	2000	2008	Ratio 2008/1990
Argentina	71	86	85*	1.2
Brazil	38	104	101	2.6
Chile	73	83	91	1.2
Colombia	50	69	91	1.8
Mexico	53	72	90	1.7
Peru	67	87	89	1.3
Canada	101	107	100**	1.0
France	98	110	113	1.1
United Kingdom	88	102	99	1.1
United States	92	94	94	1.0
China	49	63	76	1.6
Japan	97	102	101	1.0
Korea, Rep.	90	94	97	1.1
OECD average	91	108	105	1.1

^{* 2007, ** 2006}

Sources: Barro-Lee (2000 and updates); www.unesco.org.

Fig. 07 – The Municipalization of Primary Level

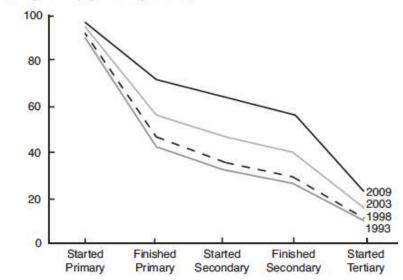


Sources: National Institute for Education Studies and Research/ Brazilian Ministry of Education (INEP/MEC).

Fig. 08 – Higher Education Attainment in All Levels

Change in Educational Attainment in Brazil, 1993-2009

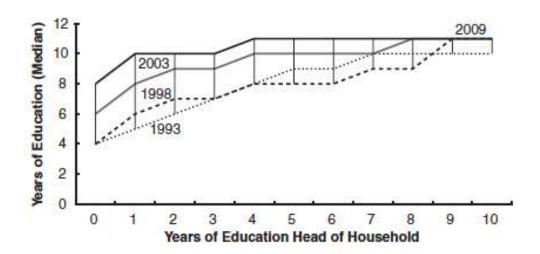
(percentage of the population aged 26-30)



Source: PNAD, several years.

Fig. 09 – Intergenerational effects: young becoming better educated than their parents

Figure 20. Educational Attainment of 20-Year-Olds Compared with Their Household Heads, 1993-2009



Note: PNAD, various years.

Fig. 10 – Bridging the regional disparities gap

Figure 16. Regional Trends in Educational Attainment, 1993-2009 (years of schooling completed by population aged 26-30)

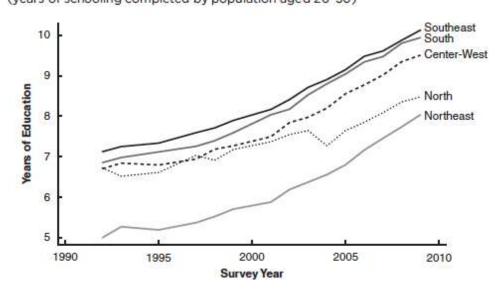
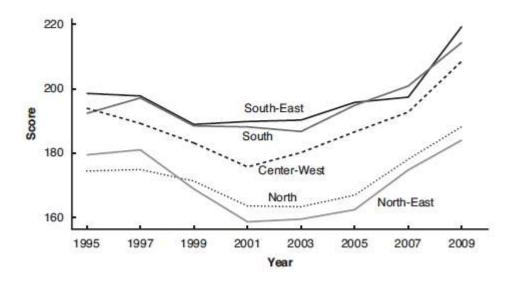


Fig. 11 – Performance on SAEB: much work to be done

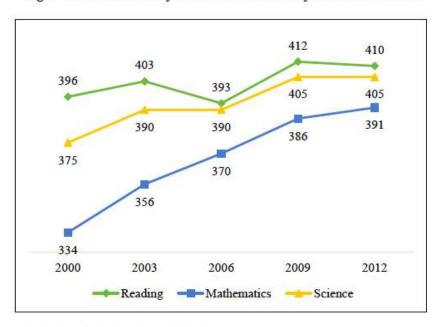
Figure 19. Fourth-Grade Math Performance by Region, 1999-2009



Note: 1995-2005 scores are from SAEB; 2007 and 2009 scores are from SAEB/Prova Brasil.

Fig. 12 – Performance on PISA: much work to be done

Figure 2.2: Evolution of Brazil's PISA scores from 2000 to 2012



Sources: MEC 2014 and OECD, PISA 2013.

Fig. 13 – The puzzle of alignment by stick-and-carrots

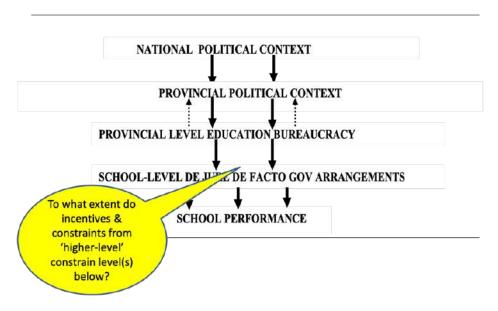
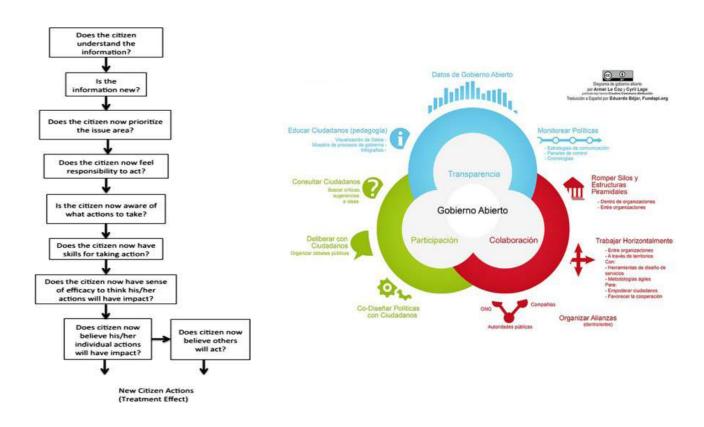
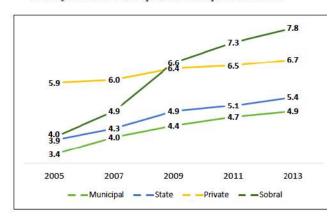


Fig. 14-1 and Fig. 14-2 – The civic engagement "panacea"



Figs. 15 and Fig 16. – The Sobral "Secret Sauce": focus on learning

Figure 1.1: Evolution of Sobral's 5th grade IDEB scores compared those of Brazilian municipal, state and private schools





Source: MEC, INEP, IDEB 2015.

Source: WDR 2018 team.

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