***Globalization and Decentralization***


*Geoffrey Garrett*
Yale University

*Jonathan Rodden*
MIT



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There has been a clear trend in recent decades towards the decentralization of fiscal and political authority from national to state and local governments in numerous countries around the world. This paper assesses the common perception that decentralization has been driven by the rapid pace of international economic integration in the 1980s and 1990s.

Above all, we focus on possible causal mechanisms linking globalization and decentralization by contrasting and ultimately joining two kinds of arguments. First, levels of decentralization might be viewed as long-run efficient responses to demands made by investors and voters. A recent body of literature suggests that economic integration strengthens demands for fiscal decentralization, but we point out that under some conditions economic integration is even more likely to have the opposite effect. We provide surprisingly strong empirical evidence that increased trade and capital mobility are correlated with fiscal centralization rather than decentralization.

Second, we argue that decentralization is best understood as a strategic choice made by self-interested politicians at the central level. We provide empirical evidence that is consistent with opportunistic attempts by central governments to shift costs and deficits onto local governments.

This paper focuses exclusively on *fiscal* decentralization. Central governments might ostensibly decentralize “formal” authority by increasing the constitutional responsibilities or freedoms of subnational governments, by setting up regional parliaments, or by introducing direct elections for municipal officials. But if increased taxing authority or intergovernmental transfers do not accompany these moves, they will not change the "rules of the game" in any substantial way.

For this reason, we define and measure decentralization as the subnational (combined state and local) shares of total public sector revenues and expenditures. Table 1 provides an overview of countries for which yearly expenditure data have been available for most of the last two decades.[1] Averages for the period from 1982 to 1989 are shown on the left, and averages for 1990 to 1997 are shown on the right. This cut-off is useful because several countries have undergone transitions to democracy in the late 1980s, and by all accounts, global economic integration has increased substantially after 1990. The countries displayed in Table 1 demonstrate a good deal of variation in vertical fiscal structure. They range from countries like Canada and the United States, for which more than half of all government expenditure takes place at subnational levels, to countries like Paraguay or Thailand, where less than ten percent of total expenditure is done by subnational governments.

[TABLE 1 ABOUT HERE]

For our purposes, however, the far right column in Table 1 is more important. It shows that decentralization was by no means a universal phenomenon in the 1990s. Some countries—in fact nearly half of the sample—became more centralized. But on the other hand, some countries —most notably Brazil, Mexico, Peru, and Spain—

[1] All public finance data are taken from the IMF Government Finance Statistics Yearbook, various years. Most of the averages shown in Table 1 are for the entire period specified, but because of missing data, some of the averages reflect shorter periods.

considerably decentralized expenditures between the 1980s and 1990s (by more than 10 percent of total expenditures).

The goal of this paper is to explain variations in decentralization both among countries and over time. The first section lays out the key theoretical arguments and reviews existing empirical work. The second section uses regression analysis of cross-section averages to establish some basic facts about determinates of levels of decentralization. The third section analyzes a panel data set to explore intertemporal dynamics in decentralization as well as cross-national differences. Section four discusses the results, makes some conclusions, and maps out an agenda for further research.

## I. The Determinates of Decentralization

This section reviews some old and new arguments about the determinants of decentralization. We begin with existing arguments about essentially invariant factors that likely affect overall levels of decentralization across countries. We then move on to discuss political democracy and federalism – two institutional factors that might affect both cross-national and diachronic variations in decentralization. Finally, we then discuss common arguments about why globalization might lead to greater decentralization and propose an alternative view in which market integration promotes fiscal centralization.

*Preference Heterogeneity*

Previous theoretical and empirical studies of decentralization have focused on basic underlying characteristics of societies that might affect the costs and benefits of adopting a decentralized fiscal system (Oates, 1972; Panizza, 1999; Diaz-Cayeros 2000). The most important arguments see fiscal decentralization as an efficient response to the underlying heterogeneity of preferences in the society. A key argument of traditional fiscal federalism theory (Musgrave 1959, Oates 1972) is that the benefits of decentralization are positively correlated with the variance in demands for publicly provided goods. Other things equal, central governments in larger, more diverse societies will find it more difficult to satisfy divergent preferences over redistribution and public goods. "In small, relatively homogeneous countries, public choices are closer to the preferences of the average individual than in larger, more heterogeneous countries" (Alesina & Spolaore 1997, 1029).

Although the political process through which demands for decentralization are transformed into policy is not made explicit, this line of argument maintains that excessively centralized systems in large, diverse countries will face overwhelming pressure to decentralize, lest they fall apart through secession or civil war. Indeed, Wallace Oates (1972) and Ugo Panizza (1999) find that decentralization is positively correlated with country size and ethno-linguistic heterogeneity.

*Institutions*

It follows naturally from these arguments that democracies should be more decentralized than authoritarian systems. If geographically-dispersed heterogeneous preferences over public goods are taken as a given, a rent-seeking authoritarian government that can rule without the consent of the majority should be able to sustain higher levels of centralization, while a democratic government in the same society would be more likely to succumb to demands for decentralization (Panizza 1999, Alesina & Spolaore1997). In addition, decentralization of authority plays an important part in the descriptive political science literature on transitions to democracy (Haggard 1999). In many cases, regional elites have played important roles in the protests and negotiations that have led to democratic transitions. In such new democracies, decentralization is often an attractive political strategy for reelection-seeking politicians who wish to build or consolidate local bases of support (O'Niell 2000).

Levels of fiscal decentralization might also be influenced by the presence of federal political institutions. Above all, federal systems are distinct from unitary systems in that they provide formal or de facto veto authority to regional politicians over all or some subset of federal policy decisions (Rodden 2000). In most cases this is accomplished through special constitutional protections and amendment procedures and an upper house that disproportionately represents the regions. It seems likely that such institutions will allow subnational officials to bargain for a larger share of the public sector's resources than their counterparts in unitary systems.

*Strategic Deficit-Shifting*

Whether demands for (de)centralization come from voters, investors, or multilateral lending agencies, these demands are only transformed into policy if they are compatible with the incentives of the central government. Decentralization does not simply happen—it is a strategic choice made by self-interested politicians. Central government officials may face incentives for decentralization that have little to do with the demands of voters, investors, or lenders. A common complaint among critics of fiscal decentralization in Latin America, Africa, and Eastern Europe is that it is little more than a thinly veiled attempt to offload central government deficits onto state and local governments by increasing subnational expenditure responsibilities without a corresponding increase in revenues. Such critiques are not limited to poor countries—similar complaints have been made about "new federalism" initiatives in the U.S. federal system, and about recent changes in the Canadian intergovernmental fiscal system.

*Globalization*

Thus far we have presented distinct arguments about the demand for and supply of fiscal decentralization. The underlying heterogeneity of preferences over redistribution and collective goods might drive the demand for decentralization, but ultimately the supply might be affected by the structure of political institutions. A new literature on economic integration and the vertical distribution of governmental authority builds on demand-driven arguments about the heterogeneity of preferences over government policy. Alesina and Wacziarg (1998) and Alesina and Sporaore (1997) examine a basic tradeoff between the benefits of large jurisdictions and the costs of heterogeneity in large populations. The benefits of size derive from the availability of more efficient forms of taxation, common defense, free trade within the country, economies of scale, and the decreasing per capita cost of non-rival public goods. Large size has a political price, however—the difficulty of satisfying a more diverse population (See also Seabright 1997). Bolton and Roland (1997) emphasize a related trade-off. In their model, the benefits of coordination and economies of scale are traded off against the benefits of setting tax rates and determining redistributive transfers locally in societies with heterogeneous income levels across regions.

In both models, sufficiently high levels of heterogeneity—whether derived from ethnicity or income distribution—lead to demands for secession. The costs and benefits of maintaining a large jurisdiction thus affect the strength of such demands, and ultimately, the number and size of nations. Economic integration can have a profound affect on these costs and benefits. "The intuition is that a breakup of nations is more costly if it implies more trade barriers and smaller markets. On the contrary, the benefits of large countries are less important if small countries can freely trade with each other. Concretely, this results suggests that regional political separatism should be associated with increasing economic integration" (Alesina & Spolaore 1997, 1041).

But many countries might stop short of breaking up. Instead of seceding, regionally distinct groups with strong preferences might opt for a fiscal decentralization scheme (Alesina & Spolaore 1997, 1046). After all, "any benefits of decentralization that might be obtained in a word with several nations may also be achieved within a unified nation by replicating the administrative structure of the world with several nations and implementing a suitable degree of decentralization of authority among the regions" (Bolton & Roland 1997: 1057-58). Thus ceteris paribus, as long as some heterogeneous countries are able to resist breakups, globalization should lead to decentralization.

Decentralization might not only be preferred by voters in the global economy, but by international investors as well.  The “market preserving federalism” literature argues that under the right conditions, fiscal decentralization forces governments to compete more fiercely for mobile capital, which creates incentives for politicians to provide good investment environments, keep taxes (and rents) low, and ultimately preserve markets (Weingast 1995).  Moreover, fiscal decentralization found the favor of the World Bank and IMF in the late 1980s and early 1990s, creating an additional external demand for decentralization in some developing countries.

These arguments in favor of a globalization-decentralization nexus are impressive in numerous respects – the logic underpinning them is straightforward; they have been propounded by influential political economists and accepted by powerful institutions; and they accord with the stylized fact of increasing decentralization in recent decades.

We wish to argue, however, that under a variety of conditions globalization might also provide politicians with strong countervailing incentives to centralize spending. First of all, trade-dependent countries are more vulnerable to external shocks, increasing citizens demands for government redistribution (Cameron 1978; Rodrik 1997). It is the flip side of Weingast's market preserving federalism that central governments are more likely to be able to play a powerful redistributive role than local governments. And the more globalization proceeds, the stronger will be the demands from "at risk" localities to centralize fiscal policy.

If a region in a large country is hit with an idiosyncratic, region-specific negative shock, citizens might expect to be compensated with increased transfers from the rest of the country (Sachs and Sala-I-Martin 1992). Voters in small, exporting jurisdictions with relatively un-diversified economies (hence, more vulnerable to asymmetric shocks) might not be enthusiastic about fiscal decentralization if it implies a smaller role for the central government. Consider the U.S. states and Canadian provinces that are dependent on exports of farm products and natural resources. Alternatively, consider the plight of the new East German Länder and the poor “old” Länder like Bremen and the Saarland. In fact, a majority of the German states favors a larger, rather than a smaller spending role for the central government (Rodden 1999). The same can probably be said of the Australian states, which have the authority to tap a variety of revenue sources but decline to do so. We believe these examples may be the rule rather than the exception.

Furthermore, regional heterogeneity of preferences might actually create increased spending pressure on the central government in the context of globalization. To the extent that some large, diverse countries like Canada, India, Russia, and Indonesia are able to stay together in spite of demands for secession, globalization might only increase the costs of staying together. Secession threats from a region with distinct preferences may not be credible in an autarchic world, but such threats become much more credible in a world of free trade. Consider the importance of potential trading partners in bolstering the credibility of exit threats made by Estonia, Quebec, the Slovak Republic, or oil-rich Russian republics, or the importance of the European Union to Scottish and Basque independence movements.

These newly credible exit threats might be a useful bargaining chip in negotiations over the distribution of central government spending. To the extent that there are benefits to the rest of the country from keeping breakaway regions in the union, the rest of the country may be willing to send disproportionately large transfers to such regions to buy their cooperation. Knowing this, of course, such regions face incentives to amplify their threats. This is a familiar story in post-Soviet Russia (Treisman 1999). This logic may lead to fiscal *centralization* rather than decentralization. Even if subnational governments end up gaining autonomy and spending more, this effect may be overwhelmed by the larger spending role of the central government. If the central government wishes to use public spending to "buy" the loyalty of voters in would-be breakaway regions, it will try to spend the money directly rather than through general-purpose transfers to regional governments.

The point of these conjectures is that even if one accepts the Alesina-Spolaore logic about the effects of globalization on the likely breakup of nations, it may well be inappropriate to argue that decentralization within an existing country is a halfway house to secession. The opposite may be true – in order to forestall secession, the national government may have to centralize fiscal policy so as to deliver benefits (in the form of guaranteed fiscal redistribution) to would-be secessionist localities.[2]

The remainder of the paper tests whether the centralizing or decentralizing logics of globalization is the more dominant.

## II. Empirical Analysis of Cross-Section Averages

[2] Our argument about fiscal centralization and globalization should be distinguished from a suggestion made by Diaz-Cayeros (2000), building from Dahl and Tufte (1973) about trade and decentralization. Diaz-Cayeros conjectures that countries that trade more internally (and hence less with other countries as a portion of GDP) require a greater role for subnational governments. It is not clear, however, why more active local governments would enhance internal trade. On the contrary, strong subnational governments often distort and undermine rather than facilitate internal trade (see Rodden and Rose-Ackerman 1997).

This section tests the propositions laid out in section one with OLS regression analysis using data from a cross section of countries from around the world. We start out by conducting separate analysis on the two periods displayed in Table 1: 1982 to 1989, and 1990 to 1997. The cases are selected based on the availability of sufficient data on the dependent variable—subnational expenditure as a share of total public sector expenditure. Higher scores on the dependent variable thus denote more decentralization.

The independent variables follow from the discussion above. First, to test arguments about size and heterogeneity, we include the natural logs of *area* (square kilometers) and average *population*. The basic model also includes the log *of GDP per capita* in inflation-adjusted U.S. dollars, since Oates (1972) and Panizza (1999) find that wealthier countries demonstrate higher levels of decentralization. Following Panizza (1999), we also include a measure of *ethnic fractionalization* as a proxy for preference heterogeneity (Taylor and Hudson 1972). Next, we include averages of Gurr's 20-point measure of *democracy*. We also include a simple dummy variable for political federalism.

The next group of variables address globalization using two simple measures. We use *trade/GDP* ratios to capture the international integration of national goods and services markets. Second, *capital account openness* is a dummy variable from the IMF's annual Exchange Arrangements and Exchange Restrictions describing whether countries impose significant restrictions on capital account transactions (coded as "0") or not ("1" = open). This is a simple way to measure international capital mobility that is available for all IMF members on an annual basis.

Finally, we include two public finance variables. First, it seems possible that decentralization might be more advanced in countries with larger public sectors, so we include a control for the average overall scale of government spending as a portion of GDP. Finally, in order to examine the plausibility of the offloading hypothesis, we include the central government's average fiscal balance as a percentage of revenue.

*Results*

The results from the regressions on the first period (1982-1989) are presented in Table 2, and the results from the second period (1990-1997) are presented in Table 3.

[TABLES 2 AND 3 ABOUT HERE]

First we estimate a basic model using the variables that have been analyzed by others. *Area* did not approach statistical significance in any of the estimations, so we only include it in the first, most basic model and leave it out of subsequent regressions. We do the same for *ethnic fractionalization* which, contrary to the findings of Panizza (1999), was not significant in any of our estimations. However, the main findings of previous studies hold up-- decentralization is positively correlated with *population* and *wealth* in both the earlier and later periods. These findings are reasonably robust, though they lose significance when democracy and federalism are added.

Next, we add the two institutional variables. *Democracy* has the expected sign in both the earlier and later periods, though it is only significant in the earlier period. This is not surprising, given that after many successful transitions to democracy, the later period demonstrates less variation across countries. Thus it appears that democracy is positively correlated with decentralization, but the pooled time series analysis below provides a much better test. Second, the *federalism* variable clearly accounts for a good deal of cross-national variation in fiscal decentralization. As expected, state and local governments are responsible for a much larger share of public spending in formally federal systems.[3] This finding is very robust in every estimation for both periods.

Next, we add the globalization variables. Capital account openness had no significant effects on decentralization in either period in any specification. Trade, in contrast, was significantly associated with less decentralization in the full model for the 1980s, and its coefficient was also negative in all other specifications for the 1980s and 1990s. This gives some preliminary support to our contention that – rather than promoting decentralization through a "decreasing minimum efficient scale of politics" process, trade integration increases centralization because it increases the price in terms of fiscal redistribution from other areas that localities demand not to secede.

Finally, we add the public finance variables. The coefficient for *total government expenditure* is positive for both estimations during the early period, and even significant in the full model for the first period, but it is not significantly different from zero in the later period. Thus if anything, we have very limited evidence that countries with larger public sectors tend to be more decentralized.

The coefficient for *central government balance* is not significantly different from zero during the earlier period, but it substantively quite large, negative, and significant

[3] Note that this does not mean that states and provinces are less dependent on transfers from the central government. Our spending variable does not distinguish between expenditures funded by own-source revenue and those funded by transfers. Rodden (2000) shows that federal and unitary systems are, on average, equally reliant on central government transfers.

during the second period. This result is quite interesting, but it is difficult to interpret. During the 1980s, there was no relationship between central government fiscal balance and levels of decentralization, but during the 1990s, countries with large central government deficits tended to be significantly more decentralized. Our offloading hypothesis seems like a potential explanation. As central governments face increasing pressure to maintain fiscal balance, they attempt to cut expenditures by offloading responsibilities to subnational governments. If this strategy were completely successful, however, we would have to expect that if anything, central government fiscal balance would be *positively* correlated with decentralization. In any case, our offloading argument is a dynamic one, and it cannot be properly evaluated with cross-section averages. Nevertheless, this result does suggest that there may an interesting relationship between the central government's fiscal situation and the decision to decentralize expenditures.

Similar models were also estimated using state and local share of total government *revenue*, and the results were virtually identical to those presented here.

In sum, the cross-section analysis finds reasonable support for the most important findings of Oates (1972) and Panizza (1999) that larger and wealthier countries tend to be more decentralized. Moreover, there is limited support in the cross-section data for Panizza's (1999) finding that more democratic countries tend to be more decentralized. In addition, federal countries are more decentralized.

Our findings on trade and capital account openness were not strong, but the persistent negative coefficient on trade suggests that further exploration is necessary. Finally, we have reason to believe that the relationship between central government fiscal balance and decentralization should be explored more carefully using time series data. We take up these tasks in the next section.

## III. Pooled Time Series Analysis

Table 4 presents our regression analysis of spending and revenue decentralization using panel data, comprising observations for over 60 countries for the period 1978-1997. We believe the panel specification is important in this context because some of the independent variables of interest have changed considerably in the past twenty years. Most notably, many countries in our sample have democratized, expanded their trade with the rest of the world, and opened their capital accounts. Our empirical methodology is conservative. We estimate all regressions using panel corrected standard errors, taking into account the unbalanced nature of our panels (almost half the observations that would be in a perfectly rectangular panel data set are missing). We include lagged dependent variables and dummy variables for all countries (fixed effects) to take into account over time and cross-national variations that should not be attributed to any of our independent variables. As a result, we are confident about the robustness of the remaining relationships in the data.

The first thing to note about the regression estimates is that patterns of decentralization were sticky over time (the coefficients on the lagged dependent variables were over .7 and highly statistically significant). Furthermore, the battery of country dummy variables (not reported) was highly significant over time (the null hypothesis of common intercepts for all countries can be rejected with extremely high levels of confidence). As a result, the $R^2$ for both of the estimated equations were also very high, above .99. In general, the patterns of parameter estimates were very similar for both spending and revenue decentralization. For convenience, we therefore concentrate on the spending equation (the first column of Table 4), though we must compare both equations in the case of the effects of the central government's fiscal balance because in this case there are important differences among the parameter estimates in the spending and revenue equations.

[TABLE 4 ABOUT HERE]

*Control Variables*

Let us begin with the basic control variables. As expected, larger countries (in terms of population) were more decentralized. In contrast to the cross-section analysis, wealth is negatively correlated with decentralization in the expenditure equation. Although the substantive effect is not very large, and the negative coefficient is not statistically significant in the revenue equation, this result does suggest that the notion that wealth leads to decentralization should be reconsidered. Once again, land area had no impact on decentralization. Not surprisingly, countries with formal federal political structures tended also to be fiscally more decentralized. Consistent with normative views about democracy, more democratic countries tended to be more decentralized (though this effect was not significant in the revenues equation).

*Globalization*

For present purposes, the most interesting parameter estimates concerned the two globalization variables. Put simply, countries that were more exposed to trade and that had open capital accounts had more centralized fiscal systems. This is wholly inconsistent with the logic of Alesina-Spolaore or Bolton-Roland argument in which decentralization is a compromise on the way to secession, made more likely by globalization because of the reduced costs of small size in open markets. But it is completely consistent with our counter argument that globalization increases the price central governments must pay to stop regions from seceding, and that a large part of this price comprises centralization of taxing and spending authority so as more effectively to redistribute wealth and risk to regions that suffer asymmetric economic shocks.

Of course, we should not overestimate the magnitude of these effects. The coefficient of -0.008 on open capital account variable in the spending equation, for example, suggests that removing all significant restrictions on capital account transactions only increases the state and local share of total expenditure by .8 of one percent of total government spending. In the same equation, the effect of moving from a trade/GDP ratio of 20% (roughly the level of Brazil and the US) to 100% (considerably less than the figures for Belgium, Ireland or the Netherlands) is estimated to have reduced the state and local share of expenditures by 2.7 percentage points. It should be remembered, however, that these are very conservative estimates given the inclusion of lagged dependent variables and fixed effects in our regressions.

*Deficit-Shifting*

Finally, the results do provide evidence that decentralization should not only be understood as a response to demands of voters and investors, but also as a strategic attempt by central governments to shift deficits onto subnational governments. Both the level and the lagged level of the central government's surplus (deficits are negative numbers) as a percent of revenue are included in the regressions. By including the lagged level, we attempt to control for trends and isolate short-term dynamics. It is important to note that the coefficients for central government balance are statistically significant, but have the opposite sign in the expenditure and revenue equations. Controlling for the previous year's level, higher surplus levels (ie. lower deficits) are associated with *higher* subnational expenditure and *lower* subnational revenue. Note that the models control for fluctuations in GDP and overall government expenditure. Other things equal, improvements in the central government's fiscal stance are associated with larger shares of total public sector expenditure taking place at the subnational level, but smaller shares of total public sector revenue flowing to state and local governments. Thus improvements in central government finances seem to be achieved, at least in part, on the backs of state and local governments.

These results dovetail with frequent complaints of "offloading" or "unfunded mandates" around the world, but they are merely suggestive. Considerable further analysis is needed. The rather straightforward OLS model presented here, while useful for assessing the other theoretical claims under analysis, may not be an optimal way to address the dynamics of strategic deficit-shifting. Future work might use an error correction set-up with dynamic panel estimation techniques to examine the relationship between central and subnational deficits (see Arellano & Bond 1998). Such analysis might consider more carefully the opposite causal relationship as well-- subnational governments are often able to shift their own deficits onto the central government (Fornasari, Webb, & Zou 1999; Rodden 2000).

## V. Conclusion

It is commonly assumed that globalization has had two effects on political systems around the world. On the one hand, globalization has reduced the minimum efficient scale of politics, resulting in the proliferation of nations. On the other hand, globalization has also been associated – on the same logic – with decentralization within nations. We do not wish to debate the merits of the first proposition, but this paper calls seriously into question the globalization-decentralization nexus.

We have argued that if regional threats of secession are more credible in countries that are more integrated into international markets (which seems eminently plausible), this increases the bargaining power of regions within extant nations. In turn, we expect that the price would-be secessionist regions demand to stay within federations includes fiscal centralization. Our reasoning is straightforward. As fiscal federalists have long known, decentralization increases economic competition among regions, and all else equal this is likely to result in smaller governments – and hence less cushioning of adverse economic shocks through fiscal policy. In more integrated economies, these shocks are likely to be larger and less predictable, exacerbating the demands for governmental redistribution of wealth and risk. Powerful regions know that it is centralized systems of taxing and spending, rather than decentralized ones, that are likely to deliver the most fiscal redistribution in favor of their citizens. Hence, globalization increases fiscal centralization.

Our paper thus contrasts the economic logic of fiscal decentralization with the political logic of centralization. Globalization may have made it possible for smaller political units to break away from larger extant nations. But it has also empowered regions that choose to stay within countries to push for fiscal arrangements that better mitigate market risk for citizens within their borders. And it is centralized systems that achieve this objective.

Finally, we have also shown that the vertical organization of the public sector is much more than an efficient institutional response to shifting demands of voters and investors. More attention must be given to the role of political incentive structures. We have shown that democracy and political federalism affect fiscal decentralization. Moreover, we have presented preliminary evidence suggesting that decentralization can be explained as an attempt by central governments to shift deficits onto subnational governments. Future work might take this finding in a number of different directions. In addition to improved specification of the inter-relationship between central and subnational deficits, future work might examine whether the relationship is actually conditional on other institutional factors.

In short, we believe that a number of important issues linking globalization and the movement of authority between central, subnational, and even super-national governments remain unresolved. We believe that the most important work on the horizon will emphasize the role of political goals and institutions.

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