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Local Revenue Hills: Evidence From Four U.S. Cities

During periods of fiscal crisis, as in FY 2003, predicting the effects of local tax increases on revenues is essential if state and municipal leaders are to design credible strategies for balancing short- and long-term budgets. In **Local Revenue Hills: Evidence From Four U.S. Cities** (NBER Working Paper No. 9686), co-authors **Andrew Haughwout, Robert Inman, Steven Craig, and Thomas Luce** estimate the effects of local taxation on local economic activity in four large U.S. cities: Houston, Minneapolis, New York City, and Philadelphia. With those estimates, the authors compute each city's revenue hill: the path of marginal tax revenues in relation to tax rates.

The authors find that Houston, New York City, and Philadelphia are near the peaks of their revenue hills. Minneapolis remains comfortably down its revenue hill, allowing it significant additional taxing capacity. In all four cities, the marginal tax dollar fails to deliver a full dollar of public service benefits, suggesting that distributive local politics may be setting those cities' budgets.

For two of the cities for which the authors have employment data — New York and Philadelphia — the effect of tax increases is to reduce city jobs. In 1970, New York City had 5.28 percent of the nation's jobs. By 2001 it had 2.88 percent. The job situation reflects in part the statistically significant negative effect of income tax rate changes: taxes rose from a top marginal rate of 2 percent to 4.66 percent in 1994

before dropping to 3.592 percent in 2001. The authors predict that the city's total job loss because of increases in city income tax rates would have been 490,000 jobs, but Mayor Giuliani's 1994 tax cuts restored 160,000 of those jobs for a final, tax-induced decline in city employment of about 330,000 jobs. Similarly, Philadelphia lost 173,000 jobs between 1971 and 2001 because of increases in city wage tax rates.

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However, the authors estimate that without Mayor Rendell's wage tax cuts begun in 1996, Philadelphia's job loss would have been an additional 30,000 jobs. The New York City and Philadelphia experiences lead the authors to conclude that lowering city taxes is likely to be a cost-effective way to increase city employment.

The recent cuts in New York and Philadelphia's income and wage taxes do mean lost tax revenues and presumably lower public services for city residents, but the added city jobs offer an important compensating benefit. The end result is a smaller public sector, but a larger and arguably more productive private city economy.

The authors conclude that a city's revenue capacity is limited by the mobility of its residents and busi-

nesses. Houston and Philadelphia have nearly exhausted their revenue capacity. Mayor Bloomberg's recent increase in city property tax rates has moved New York City to the top of its revenue hill. Only Minneapolis can raise significant new revenues from taxes. Interestingly, Houston can raise a modest amount of additional revenues by lowering its property tax rate; the city is just beyond the peak of its revenue hill.

For Houston, New York, and Philadelphia, balanced city budgets will require the city to hold new spending to the rate of inflation. The authors' study reveals a fundamental tension between the interests of city public employees, poor households within the city, and city taxpayers. Tax increases unmatched by tax-financed compensating benefits for taxpayers — whether property owners, consumers, or firms — will drive those taxpayers from the city. Property values fall, business sales decline, and the city's tax base shrinks. To protect city economies, a dollar of taxes paid must be matched by at least a dollar of public service benefits. That was not the case in any of the sample cities, though nearly so in Minneapolis.

— Les Picker

Bank Concentration and Crises

Diametrically opposed views exist on the question of whether bank consolidation in various countries enhances financial stability. Some analysts emphasize that large banks can diversify better, earn higher profits, take fewer risks, and can be monitored by regulatory agencies more easily, all of which bodes well for stability. However, other studies maintain that because large banks frequently receive subsidies under “too big to fail policies,” these financial institutions in fact may take greater risks, and indeed their very size and complexity may make them more difficult to oversee.

In an effort to resolve these opposing interpretations, co-authors **Thorsten Beck, Asli Demirguc-Kunt, and Ross Levine** study the impact of bank concentration, bank regulations, and national institutions on the probability of experiencing a systemic banking crisis. In **Bank Concentration and Crises** (NBER Working Paper No. 9921) they rely on data gathered from 70 countries over the period 1980-97. It is the first paper to examine the impact of concentration on crises across a broad cross-section of nations while controlling for differences in regulatory policies, national institutions governing property rights and economic freedom, the ownership structure of banks, and macroeconomic and financial conditions.

The researchers define banking concentration as the share of assets of a country’s three largest banks. In their analysis, they control for international differences in deposit insurance practices, capital regulations, restrictions on bank activities and ownership, and the overall economic environment. All of these factors are evaluated in regard to episodes of banking sector distress occurring during the years studied. The researchers acknowledge that systemic banking crises are not always easy to define or to date. Episodes of banking sector distress are classified as systemic crises if emergency meas-

ures had to be taken to assist a nation’s banking system (bank holidays, deposit freezes, blanket guarantees to depositors or creditors, or large-scale nationalization.)

A financial crisis also was considered systemic if non-performing assets reached at least 10 percent of

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total assets at the height of the crisis, or if the cost of rescue operations was at least 2 percent of GDP. The authors note, too, that many crises continue for years. They exclude the years after the initial year of the crisis because during a crisis the behavior of some of the explanatory variables is likely to be affected by the crisis itself, leading to reverse causality. Yet including the entirety of the crisis years does not change their conclusions. Also, some countries experience multiple crises. (Turkey, for example, suffered systemic banking crises in 1982, 1991, and 1994.)

Beck, Demirguc-Kunt, and Levine produce three major findings. First, they find that crises are less likely in more concentrated banking systems, even after controlling for a wide array of macroeconomic, regulatory, and institutional factors. This is consistent with the concentration-stability argument that banking systems characterized by a few large banks are more stable than less concentrated banking markets. The researchers do note that there is some evidence that the stabilizing effect of bank concentration is weaker at higher levels of concentration, but they maintain that this does not change the fact that the overall impact of concentration on fragility is negative and that the relationship holds when controlling for bank regulations and the overall competitive/ institutional climate.

Second, more competition lowers the probability that a country will suffer a systemic banking crisis. The data indicate that fewer regulatory restrictions on banks — lower barriers to bank entry and fewer restrictions on banking activities — reduce bank vulnerability. Indeed, entry

barriers and activity restrictions have a destabilizing effect on banking systems. The evidence shows that banking systems where a larger fraction of entry applications are denied, and those where regulations restrict banks from engaging in non-lending activities, have a greater chance of experiencing a systemic crisis. The authors caution, however, that they do not have time-series data on the regulatory variables, thus lowering the power of the regulatory results. Nevertheless, the data never support the view that more competition induces greater fragility. To the contrary, more competitive banking systems and those with fewer entry regulations and activity restrictions tend to be more stable.

Third, countries whose national institutions promote competition in general have a lower likelihood of suffering a systemic banking crisis. The composite indicator of institutional development always has a negative and significant sign in the crisis regressions. Moreover, Beck, Demirguc-Kunt, and Levine find it difficult to single out the independent effect of bank regulations and bank policies that promote competition from the overall institutional environment. Yet countries with what are generally considered more desirable traditions (property rights, rule of law, political openness, low corruption) also tend to be countries with bank regulations and bank policies that support openness and

competition. Thus, while bank regulations and policies that support competition also support bank stability, these regulations and policies cannot be viewed in isolation from the overall institutional environment.

In terms of linking these find-

ings to specific parts of the concentration-stability view, the finding that competition reduces fragility is inconsistent with the argument that concentrated banking systems boost profits and therefore reduce fragility. Rather, the evidence is more consis-

tent with the view that concentrated banking systems tend to have banks that are better diversified or are easier to monitor than banks in less concentrated banking systems.

— Matt Nesvisky

The Regulation of Labor

In *The Regulation of Labor* (NBER Working Paper No. 9756), **Juan Botero, Simeon Djankov, Rafael La Porta, Florencio Lopez-de-Silanes, and Andrei Shleifer** examine employment law, industrial and collective relations law, and social security law in 85 countries to determine how nations regulate the conditions of workers and to assess the consequences of such regulation.

For purposes of their study, the researchers configure a “standardized” male worker who is a non-executive, full-time employee with 20 years of service at the same firm and whose salary plus benefits equal his country’s GNP per worker over the period. He has a non-working wife and two children, and they live in the country’s largest city. He is a lawful citizen and shares the racial and religious characteristics of the majority of his countrymen. Unless membership is required, he does not belong to a union. He enjoys good health, vacation and retirement benefits, and works a standard work-week. To complete the picture, the authors also construct a standardized employer: a locally owned factory that provides its 201 employees with all benefits as mandated.

The central labor regulations that the authors consider govern employment contracts, collective bargaining and enforcement of bargaining agreements, and industrial action by workers and employers. Using data they have assembled from national

laws for 85 countries, the researchers examine the effects of per capita income, legal origin, and leftist political power on the regulation of labor. They also consider some of the consequences of labor regulation, such as the size of a country’s unofficial economy, male and female participation in the labor force, unemploy-

ment rates, and relative wages of protected and unprotected workers. The authors conclude that patterns of labor regulation are inconsistent with the efficiency theory, which predicts that heavier regulation of labor markets should be associated with better labor outcomes. The data indicate, for example, that labor regulation raises unemployment, and reduces labor force participation. The evidence is also inconsistent with standard political theory, which sees heavier regulation of labor as a reflection of the political power of the left, residing either in government or in unions. In contrast, the evidence is generally consistent with the legal theory, which holds that patterns of regulation across countries are shaped by their legal structures, most of which are adaptations of Europe’s common and civil law traditions.

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The authors note that their

results do not suggest that efficiency forces in regulation should be totally discounted; nor do the results mean that politics are unimportant. For example, employment protection and industrial relations laws appear to affect different classes of workers differently, and this may well create a basis of political support for the politicians who expand such laws. Older workers, and those more likely to be covered by the laws, are the likely beneficiaries of labor regulations and therefore are likely to support them politically. But politics, the research shows, remain secondary to the historical origin of a country’s laws in determining a country’s regulatory style.

Finally, the researchers point out that a key result in their study is the high correlation among measures of regulation of various activities across countries: for example, nations that regulate business entry also regulate labor markets and judicial proceedings. Central to this conclusion is what they call institutional transplantation: countries have regulatory styles that are pervasive across activities and are shaped by the origin of their laws.

— Matt Nesvisky

Business Cycles No Longer Linked

In **Understanding Changes in International Business Cycle Dynamics** (NBER Working Paper No. 9859), NBER Research Associates **James Stock** and **Mark Watson** observe that, despite efforts to coordinate economic policy, business cycles are more likely to follow one pattern in the G-7's "Euro-zone countries" and another in the G-7's "English-speaking countries." That latter group includes the United Kingdom, a member of the European Union but a country whose business cycles recently have mirrored North American economies. Meanwhile, the authors find that "during the 1980s and 1990s, cyclical fluctuations" in Japan's gross domestic product or GDP have become "almost detached from other G-7 economies."

But these various differences, while intriguing, may not necessarily be a bad thing. Stock and Watson find that the growing lack of "synchronization among G-7 business cycles" is linked to some decidedly good news. They assert that the one reason these various economies appear to be marching to their own drummers is that international economic shocks have been "smaller in the 1980s and 1990s than they were in the 1960s and 1970s." This change

has had a positive effect on individual economies, making them less volatile than they were 40 years ago. It also, in a sense, has freed them to be different.

In addition, the fact that business cycles in the G-7 are "less synchronous" than they used to be should not be read as a sign that G-7 countries are drifting apart, at least in the economic sense. Stock and Watson note that G-7 countries are more tightly integrated today than they

Furthermore, as was noted previously, the contrast between Japan's business cycles and those of other G-7 members has become particularly pronounced.

Stock and Watson believe that Japan's issues speak more to its internal economic problems and growing economic ties to Asia than to a degradation of its relationship with G-7 countries. They point to internal "domestic shocks" as being responsible for "almost all of the

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were 40 years ago. And, if they were again subjected to the kinds of economic shocks they experienced in the 1960s and 1970s, the economic conditions throughout the G-7 would become more volatile. Essentially, those now diverging business cycles would be shocked into a level of conformity exceeding that of the 1960s and 1970s.

The main outlier in this analysis, Stock and Watson observe, is Japan. While in other G-7 countries economic volatility either decreased or, at worst, stayed the same in the 1990s, in Japan volatility increased.

cyclical movements in Japanese GDP," while its contrasting economic conditions also are "consistent with Asian trade being increasingly important for the Japanese economy."

Finally, Stock and Watson find that three countries — Canada, France, and the United Kingdom — appear to be particularly sensitive to potentially destabilizing economic events. They note that, "in those countries, a shock of a given magnitude would result in more cyclical volatility today than 30 years ago."

— Matthew Davis

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