Validating Output Data Using Satellite Observations

November 12, 2019

Presentation by: Stephen D. Morris

Abstract: Can officially reported output figures be externally validated? In this presentation, I will use a dynamic panel framework to assess statistics using verifiable signals of economic activity. In this context, satellite readings of nitrogen dioxide, a byproduct of combustion, are forwarded. The problem of validating China's reported gross domestic product at the sub-national level during two recent downturns is considered. During the Great Recession period, reported figures are validated for some regions, but not others, including specifically those known to be inaccurate.

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Institutions for productivity: towards a better business environment

April 25, 2019

Presentation by: Pablo Sanguinetti and Fernando Alvarez

Abstract: In 1960, average income in Latin America was 20% of that in the United States. Today, the situation remains practically unchanged. By contrast, other countries have shown significant progress in the same period: South Korea, for example, increased its relative income per capita from 7% to 67% in that period. The source of this persistent lag in per capita income is the low aggregate productivity of economies in the region. In turn, the main reason for this low productivity is not that resources in Latin American countries are particularly concentrated in low productivity sectors, but that productivity is low across all activity sectors instead. This evidence implies that the search for the fundamental causes of low productivity should focus on the institutions that shape the productive environment of firms, regardless of the sector in which they operate. The report focuses on four realms of firm interaction in that productive environment: competition, access to inputs and cooperation between firms, employment, and financing. In each case, it points to institutions that shape the policies and regulations that affect productivity through three distinct mechanisms: the process of firm entry and exit (selection), innovation, and the allocation of resources among firms.

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Large current account deficits and neglected vulnerabilities

January 30, 2019

Presentation by: J. Daniel Aromí

Abstract: Using a sample covering 46 advanced and emerging economies over 1990-2017, it is found that large current account deficits are reversed significantly faster than what forecasters anticipate. In addition, large current account deficits are followed

by negative surprises in economic growth, low asset returns and drops in sentiment. The documented regularities are robust to changes in the specification and do not seem to be explained by efficient learning dynamics. These findings are indicative of systematic neglect of vulnerabilities and have implications for the understanding of past economic events and the design of macro-prudential policies.

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Fiscal Space and Government-Spending & Tax-Rate Cyclicality Patterns: A Cross-Country Comparison, 1960–2016

January 17, 2019

Presentation by: Joshua Aizenman, University of Southern California (USC)

Abstract: This paper compares fiscal cyclicality across advanced and developing countries, geographic regions as well as income levels over 1960–2016 period, then identifies factors that explain countries' government spending and tax-policy cyclicality. Public debt/tax base ratio provides a more robust explanation for government-spending cyclicality than public debt/output ratio, but the reverse is true when capital investment is accounted for in government spending. On average, a more indebted (relative to tax base) government spends more in good times and cuts back spending indifferently compared with a low-debt country in bad times. We also find that country's sovereign wealth fund has a countercyclical effect in our estimation. Finally, the analysis depicts a significant economic impact of an enduring interest-rate rise on fiscal space, that is, a 10% increase of public debt/tax base ratio is associated with an upper bound of 5.9% increase in government-spending procyclicality.

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Fair Progress?: Economic Mobility across Generations around the World: A global report on intergenerational mobility by DECPI and Poverty & Equity Global Practice

October 24, 2018

Presentation by: Roy Van der Weide

Abstract: If you are born into a low-income family, what are the chances that you will reach the higher rungs of the socio-economic ladder? The ability to move up the ladder, both in one's lifetime and with respect to one's parents, is not only a matter of fairness, it also has major implications for the reduction of both poverty and inequality.

In this talk we will present global trends and patterns in economic mobility from the new Global Database on Intergenerational Mobility (GDIM) which underpins the "Fair Progress?" report, a joint product of the Research Group and the Poverty and Equity Global Practice of the World Bank. The GDIM has unprecedented coverage: This is the first time we have empirical evidence on mobility for almost 150 countries representative of 96 percent of the world's population. Estimates of two distinct aspects of economic mobility are included: absolute (the share of individuals who succeed in securing a standard of living or educational attainment that exceed those of their parents), and relative (the extent to which a person's position in the economic scale is independent from his or her parents' position).

The data suggest that mobility and development go hand in hand. Both absolute and relative mobility are lower in low- and middle-income countries than in high-income countries. 46 out of 50 countries with the lowest rate of mobility from the bottom to the top of the education ladder are in the developing world. Progress towards more economic mobility is slow. Improvements in mobility in the developing world have stalled since the 1960s.

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Size Dependent Policies, Informality and Misallocation

September 5, 2018

Presentation by: Frederico Lima and Laura Jaramillo, International Monetary Fund (IMF)

Abstract: We examine the effect of size-dependent policies in developing economies by focusing on a set of regulations that are applicable to firms with 20 or more formal employees in Peru. Firms can adjust to the regulations by (a) reducing their size, (b) shifting employment composition, or (c) splitting into subunits that fall below the regulatory threshold. We show that these actions are consistent with observed discontinuities in the distributions of firm size and employment composition. We extend the framework proposed by Garicano et al. (2016) to model and estimate the Peruvian economy and perform counterfactual exercises. Size-dependent regulations are costly for the economy, especially in the presence of labor market rigidities, and lead to lower aggregate wages, profits, and output. We also find that access to informal labor does not mitigate the economic impact of the size-dependent regulations, as the increase in informal employment is largely offset by a decline in formal employment.

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Labor Supply Elasticities: Evidence from Latin America

June 19, 2018

Presentation by: Olivier Bargain, University of Bordeaux

Abstract: Labor supply elasticities are key parameters to understand the potential effect of tax reforms on employment or the effect of market adjustments to demand shocks on wage inequality. While existing evidence focuses on Western countries, elasticities in low or middle-income countries are likely to be different due to high informality, limited coverage of unemployment insurance or lower female labor force participation. In particular, there is hardly evidence for Latin America. To fill this gap, we estimate labor elasticities at the intensive and extensive margin for 14 countries using a harmonized empirical approach over 2000-2014. We find that while overall elasticity of supply is of

similar magnitude to that of developed countries, differences across skilled are in sharp contrast with Europe and the US. Specifically, unskilled labor supply is more inelastic than skilled labor supply, at least in the largest labor force reservoir of married women. This result, combined with an expansion of domestic aggregate demand in South America, could concur to explain the faster progression of low-skill wages and the decline in skilled to unskilled wage differentials. We also estimate the responsiveness of formal and informal employment to wage variation. While an increase in average wage is associated with an increase in formal employment for all, it mainly triggers a decline in informal employment for men and a decline in non-employment for women.

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Trade, Skills and Productivity

May 1, 2018

Presentation by: Giordano Mion, University of Sussex

Abstract: We present a new multi-sector growth model that features nonhomothetic, constantelasticity-of-substitution preferences, and accommodates long-run demand and supply drivers of structural change. The model generates a log-linear relationship between relative sectoral demand and real income, implying non-vanishing nonhomotheticities for all income levels. The model is consistent with the decline in agriculture, the hump-shaped evolution of manufacturing, and the rise of services over time. We estimate the demand system derived from the model using household-level data from the U.S. and India, as well as historical aggregate-level panel data for 39 countries during the postwar period. The estimated model parsimoniously accounts for the broad patterns of sectoral reallocation observed among rich, miracle and developing economies. Our estimates support the presence of strong nonhomotheticity that is stable across time, income levels, and countries. We find that income effects account for over 80% of the observed patterns of structural change.

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Structural Change with Long-run Income and Price Effects

March 13, 2018

Presentation by: Marti Mestieri, Northwestern University

Abstract: We present a new multi-sector growth model that features nonhomothetic, constant elasticity-of-substitution preferences, and accommodates long-run demand and supply drivers of structural change. The model generates a log-linear relationship between relative sectoral demand and real income, implying non-vanishing nonhomotheticities for all income levels. The model is consistent with the decline in agriculture, the hump-shaped evolution of manufacturing, and the rise of services over time. We estimate the demand system derived from the model using household-level data from the U.S. and India, as well as historical aggregate-level panel data for 39 countries during the postwar period. The estimated model parsimoniously accounts for the broad patterns of sectoral reallocation observed among rich, miracle and developing economies. Our estimates support the presence of strong nonhomotheticity that is stable across time, income levels, and countries. We find that income effects account for over 80% of the observed patterns of structural change.

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Fiscal policy and the cycle in Latin America: the role of financing conditions and fiscal rules

February 27, 2018

Presentation by: Enrique Alberola-Ila, Bank for International Settlements (BIS)

Abstract: A stronger macroeconomic position when the financial crisis erupted allowed Latin American economies to mitigate its impact through fiscal expansions, temporarily reversing the characteristic procyclical behavior of fiscal policy. At the same time, in the last two decades fiscal rules have been extensively adopted in the region. This paper analyses the stabilizing role of discretionary fiscal policy over time, and the influence of fiscal financing conditions and fiscal rules in this behavior in a sample of eight Latin American economies. The analysis shows three main results: i) fiscal policies became countercyclical during the crisis, but they have turned procyclical again in recent years; ii) financing conditions are the key driver of fiscal procyclicality, while iii) fiscal rules tend to neutralize it.

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Price Regulation, Price Discrimination, and Equality of Opportunity in Higher Education: Evidence from Texas

February 5, 2018

Presentation by: Kevin Stange, University of Michigan

Abstract: This paper assesses the importance of price regulation and price discrimination to low-income students' access to opportunities in public higher education. Following a policy change in the state of Texas that shifted tuition-setting authority away from the state legislature to public universities themselves, most institutions raised sticker prices and many began charging more for high-return majors, such as business and engineering. We find that poor students actually shifted towards higher-return programs following deregulation, relative to non-poor students. Deregulation facilitated more price discrimination and enabled supply-side enhancements, which may have partially offset the detrimental effects of higher sticker prices.

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Facebook Causes Protests

December 5, 2017

Presentation by: Leopoldo Fergusson, Universidad de los Andes

Abstract

Internet and social media have been considered main drivers of recent political turmoil and protests. While rigorous evidence on the political implications of new media is not altogether absent, existing research has focused on a number of specific episodes and much of this perception is mainly the result of journalistic analyses based on anecdotes rather than methodical research. In a large panel of countries, we examine whether Facebook increases various forms of collective action and political activity. To estimate the causal impact of Facebook on political outcomes, we exploit Facebook's release in a given language as an exogenous source of variation in access to social media where those languages are spoken. Variation at the country, subnational, and individual level suggests that Facebook had a significant and sizable positive impact on citizen protests. Complementary findings suggest that both information and coordination are playing a role in increasing the incidence of protests, and that Facebook has been particularly important for increased collective action in contexts of either very strong or very weak accountability.

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Real exchange rates, income per capita and sectoral input shares

November 14, 2017

Presentation by: Javier Cravino, University of Michigan

Abstract: Aggregate price levels are positively related to GDP per capita across countries. We propose a mechanism that rationalizes this observation through sectorial differences in intermediate input shares. As aggregate productivity and income grow, so do wages relative to intermediate input prices, which increases the relative price of non-tradables if tradable sectors use intermediate inputs more intensively. We show that sectorial differences in intermediate input shares can account for two thirds of the observed elasticity of the aggregate price level with respect to GDP per capita. The mechanism has stark implications for industry-level real exchange rates that are strongly supported by the data.

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Technological Absorptive Capacity and Development Stage: Disentangling Barriers to Riches

October 16, 2017

Presentation by: Rodrigo Fuentes, Universidad Católica de Chile

Abstract: Adoption of better technologies is a crucial way for developing countries to close productivity gaps with leading economies. However, the possibility of growing through technological adoption depends decisively on the country's absorptive capacity. We build a theoretical model of technology adoption that focuses on four factors that shape the countries' technological absorptive capacity, namely: i) years of education; ii) quality of the educational system; iii) barriers that impede the entry and exit of firms; and iv) the institutions that enhance or impede the diffusion of new technologies. We calibrate the model for a sample of 86 economies. The United States is our benchmark leading economy. We disentangle the relative weight of each development factor in explaining per capita income differences and study patterns in relationships between the type of development barrier and the level of development. Our results show that in relative terms, years of education and education system quality along with high barriers to opening new firms are the main impediments that middle to high-income economies face in closing the gap with the United States. Education as whole (quality plus years of education) explains 50% of the gap between high-income countries and the United States while the entry costs account for nearly 25% of this gap. A remarkable result is the small effect that individual reforms have on steady-state productivity in low-income countries. Outside of institutional framework, the remaining three factors are individually responsible for less than 15% of the gap. This result is explained by poor global absorptive capacity that reduces the effect of each factor when implemented individually. In fact, there are significant nonlinearities between development level and the effects of individual reforms, which are due to the strong complementarities between the different development factors.

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Slum Growth in Brazilian Cities

September 5, 2017

Presentation by: Guillermo Alves, CAF

Abstract: I study the growth in the number of households without basic water and sanitation in Brazilian cities between 1991 and 2010 by estimating a spatial equilibrium model and solving for a set of counterfactual equilibria. I explain why cities experiencing rapid economic growth usually experience rapid slum growth. First, households migrate rapidly to these cities following higher wages. Second, cities' housing supplies are more elastic for unserviced than for serviced houses. I show that when urban economic growth improves incomes nation-wide, a standard income effect reduces slum incidence. I further evaluate policies repressing slum formation or subsidizing non-slum houses' supply.

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Earnings Inequality and the Minimum Wage: Evidence from Brazil

May 9, 2017

Presentation by: Christian Moser, Columbia University

Abstract: We quantify the effect of a minimum wage on compression throughout the earnings distribution. Using the case of Brazil, which experienced a large decrease in earnings inequality while its real minimum wage increased from 1996-2012, we establish three empirical facts: (i) the decrease is bottom-driven but widespread; (ii) reductions in the firm productivity-pay premium and in the worker skill premium explain a large share of the decrease; and (iii) greater bindingness of the minimum wage is associated with compression up to the 75th earnings percentile. To assess the causal link between the minimum wage and earnings inequality, we develop an equilibrium search model with heterogeneous firms and workers. We show that the minimum wage is consistent with the above three facts and explains 70 percent of the observed inequality decrease, with half of the effect due to spillovers further up the earnings distribution.

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Trade and Migration: A Quantitative Assessment

April 4, 2017

Presentation by: Fernando Parro, Johns Hopkins University

Abstract: We present a dynamic model of international migration and trade and use the model to quantify the trade, migration, and welfare effects of actual changes in migration and trade policy. Using the EU labor force survey for 23 countries we measure the flow of workers by nationality across countries before and after the EU 2004 enlargement. We exploit the timing variation of the migration policy to measure the change in migration costs. We then use our model to quantify the gains from the actual reductions in tariff and migration restrictions. We find that the gains from trade and migration are quite different. While all countries gain from trade, new member states (NMS) gain from international migration while not all EU countries gain. We show how the results depend crucially on the extent to which the migrants congest the use of local public services and factors. Our results shades new light to the study of the policy implications of migration and trade policy reforms.

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Rethinking Detroit

February 28, 2017

Presentation by: Esteban Rossi-Hansberg, Princeton University

Abstract: We study the urban structure of the City of Detroit. Following several decades of decline, the city's current urban structure is clearly not optimal for its size, with a business district immediately surrounded by a ring of largely vacant neighborhoods. We propose a model with residential externalities that features multiple equilibria at the neighborhood level. In particular, developing a residential area requires the coordination of developers and residents, without which it may remain vacant even if its fundamentals

are sound. We embed this mechanism in a quantitative spatial economics model and use it to rationalize current city allocations. We then use the model to evaluate existing strategic visions to revitalize Detroit, and to design alternative plans that rely on .development guarantees. to yield better outcomes. The widespread e¤ects of these policies underscore the importance of using a general equilibrium framework to evaluate policy proposals.

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Offshoring and Reorganization

January 17, 2017

Presentation by: Teresa Fort, Darmouth College

Abstract: This paper examines the effects of offshoring by analyzing how it affects firms' optimal allocation of resources across activities. We address two key questions. First, we use detailed new data to provide a clear measure of offshoring and to document how it differs along several dimensions from the import of intermediate goods that has been used extensively in prior work. Second, we show how this precisely defined form of offshoring leads firms to reallocate labor away from direct production work towards technology-related occupations. This reallocation of workers is accompanied by increases in offshoring firms' product development and R&D spending. Firm reorganization highlights the importance of a new channel in which offshoring affects innovation, and may ultimately affect economic performance and growth as well.

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Heterogeneous Firms: Skilled-Labor Productivity and the Destination of Exports

December 6, 2016

Presentation by: Jorge Balat, Johns Hopkins University

Abstract: This paper studies a systematic link between the choice of export destinations and technology differences across firms. Our premise is that firms differ in the relative efficiency with which they can utilize skilled labor. In a context in which quality provision is skill-intensive and consumers in high-income countries are more willing to pay for quality, exporting firms that are more efficient in the use of skilled labor export relatively more to high-income destinations. The contribution of the paper is twofold. First, we propose a new estimation method of production functions that allows for heterogeneity in the production function coefficients across firms and addresses the aggregation problem when firms are multiproduct. The estimation strategy is based on an extension of the structural control variable approach (Olley and Pakes (1996); Levinsohn and Petrin (2003)) to multi-dimensional heterogeneous parameters. Second, we provide an empirical measure of capability of quality production and show that it is a determinant of the choice of exports, export destinations, and quality using firm-level data from Chile.

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Using Exchange Rates to Estimate Production Functions: Evidence from Colombia

November 8, 2016

Presentation by: Eric Verhoogen, Columbia University

Abstract: This paper develops an instrumental-variables methodology for estimating production-function coefficients using exchange rates as a source of exogenous variation in input prices. We use rich data from the Colombian manufacturing census, which includes information on prices and physical quantities of all outputs and inputs of firms, in conjunction with customs records on all import and export transactions of Colombian firms. Preliminary results indicate that exchange-rate movements in source countries generate sufficient across-firm variation in input usage to estimate production functions of Colombian firms, and that our estimates differ from those of proxy-variable methods currently dominant in the literature.

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Robots and Jobs: Evidence from US Labor Markets

October 26, 2016

Presentation by: Pascual Restrepo, MIT

Abstract: As robots and other computer-assisted technologies take over tasks previously performed by labor, here is increasing concern about the future of jobs and wages. We analyze the effect of the increase in industrial robot usage between 1990 and 2007 on US local labor markets. Using a model in which robots compete against human labor in the production of different tasks, we show that robots may reduce employment and wages, and that the local labor market effects of robots can be estimated by regressing the change in employment and wages on the change in exposure to robots in each local labor market---defined from the national penetration of robots into each industry and the local distribution of employment across industries. Using this approach, we estimate large and robust negative effects of robots on employment and wages. We show that the commuting zones most affected by robots in the post-1990 era were on similar trends to others before 1990, and that the impact of robots is distinct and only weakly correlated with the prevalence of routine jobs, the impact of imports from China, and overall capital utilization. According to our estimates, each additional robot reduces employment by five to seven workers, and one new robot per thousand workers reduces wages by 0.8 to 1.6 percent.

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Shifting Frontiers in Global Resource Wealth: The Role of Policies and Institutions

August 30, 2016

Presentation by: Rabah Arezki, IMF Research Department

Abstract: This paper explores the effect of change in market orientation and improvements in institutions on resource wealth using worldwide major hydrocarbon and mineral discoveries. We first analyze the effects of a change in the level of market orientation or institutions captured by a tax on multinational corporations in a two-region model of endogenous reserves based on Pindyck (1978). We then estimate the effects of changes in market orientation on a large three-way panel–resource, country and year. Our empirical results are consistent with the predictions of the model. An increase in market-orientation cause a statistically and economically significant increase in the likelihood of resource discoveries over and above the effect of changes in resource prices and depletion. A thought experiment whereby Latin America and sub-Saharan Africa were to suddenly adopt the same quality of institutions as the United States yields an increase of 25 percent in the number of discoveries worldwide. Our results provide novel evidence in support of the primacy of institutions by calling into question the view that resource endowments are an exogenous feature of an economy.

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Why Doesn't Technology Flow from Rich to Poor Countries?

May 2, 2016

Presentation by: Juan M. Sánchez, Federal Reserve Bank of St. Louis

Abstract: What is the role of a country's financial system in determining technology adoption? To examine this, a dynamic contract model is embedded into a general equilibrium setting with competitive intermediation. The terms of finance are dictated by an intermediary's ability to monitor and control a firm's cash flow, in conjunction with the structure of the technology that the firm adopts. It is not always profitable to finance promising technologies. A quantitative illustration is presented where financial frictions induce entrepreneurs in India and Mexico to adopt less-promising ventures than in the United States, despite lower input prices.

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Sharing a Ride on the Commodities Roller Coaster:

Common Factors in Business Cycles of Emerging Economies

February 16, 2016

Presentation by: Andrés Fernández, Inter-American Development Bank

Abstract: We explore the hypothesis that fluctuations in commodity prices are an important driver of business cycles in small emerging market economies (EMEs). We first document that the share of commodities in total exports in the average EME is relatively large; that commodity prices exhibit strong comovement with other macro variables along the business cycle of these economies; and that a common factor accounts for most of the time series dynamics of these commodity prices. Guided by these stylized facts, we embed a commodity sector into a dynamic, stochastic, multi-country business cycle model of EMEs where exogenous fluctuations in commodity prices coexist with other driving forces. Commodity prices follow a common dynamic factor structure in the model. When estimated with EMEs data, the model gives to commodity shocks, mostly in the form of perturbations to their common factor, a paramount role when accounting for aggregate dynamics. The median share of commodity shocks in the variance of real output across the EMEs is 42 percent. The model also performs well when accounting for other business cycle facts. A further amplification mechanism is a "spillover" effect from commodity prices to interest rates. Yet, sometimes, positive commodity price shocks have also cushioned other negative domestic shocks, particularly during the fast recovery from the world financial crisis.

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The Growing Importance of Social Skills in the Labor Market

February 11, 2016

Presentation by: David J. Deming, Harvard University

Abstract: The slow growth of high-paying jobs in the U.S. since 2000 and rapid advances in computer technology have sparked fears that human labor will eventually be rendered obsolete. Yet while computers perform cognitive tasks of rapidly increasing complexity, simple human interaction has proven difficult to automate. In this paper, I show that the labor market increasingly rewards social skills. Since 1980, jobs with high social skill requirements have experienced greater relative growth throughout the wage distribution. Moreover, employment and wage growth has been strongest in jobs that require high levels of both cognitive skill and social skill. To understand these patterns, I develop a model of team production where workers “trade tasks” to exploit their comparative advantage. In the model, social skills reduce coordination costs, allowing workers to specialize and trade more efficiently. The model generates predictions about sorting and the relative returns to skill across occupations, which I test and confirm using data from the NLSY79. The female advantage in social skills may have played some role in the narrowing of gender gaps in labor market outcomes since 1980.

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Crime and Punishment: The Impact of Violence on Economic Activity in Mexico

January 12, 2016

Presentation by: Paul Gertler, UC Berkeley

Abstract: The paper, joint with Laura Chioda, aims to quantify the short and long-term effects of urban violence. Violent crime not only imposes direct costs on society in the form of increased mortality but also has indirect economic costs. Local-level crime waves can reduce private sector investment and distort workers’ labor decisions. Such distortions are reflected in market prices and market size, and can ultimately affect welfare. Despite these potential short- and long-term costs, there is relatively limited

evidence on the causal effects of outbreaks of violent crime. We analyze social and economic costs of violence by studying recent episodes of local-level spikes in crime in Mexico. Levels of violence in Mexico have increased dramatically in the past decade due to structural changes in the drug-trafficking industry. The increase in the number of drug trafficking organizations (DTOs) fighting over the control of territory and trafficking routes resulted in a marked increase in homicide rates, as well as rates of other crimes. We rely on exogenous variation in violence generated by spikes in drug-related spikes in conflict at the municipal-by-monthly level that result from the capture or killing of DTO members to identify structural breaks in crime. Impacts on consumer confidence, employment, and access to credit are considered.