

---

# Literature Report

张晨峰, 华东理工大学商学院

---

## Abstract

### **Does enhanced mobility of young people improve employment and housing outcomes? Evidence from a large and controlled experiment in France**

- Journal of Urban Economics---2017---Julie Le Gallo,Yannick L'Horty,Pascale Petit

For disadvantaged young people, access to a means of transportation, whether in the form of a personal vehicle or reliable public transportation, can play an important role in determining school-to-work transitions. In order to find a clean source of identification to assess the impact of reducing commuting costs for such individuals, we conducted a large and controlled experiment to study the impact of the intervention of subsidizing driving lessons in France by randomly assigning young candidates to one of two groups made up of treated and untreated individuals. We assessed the impact of improving their degree of mobility through this intervention on several outcomes, including drivers' testing results, housing, and employment status. We found that young people are less mobile during their training period, and therefore less involved in actively seeking employment or improving on their current position. Once they have passed the driving test, however, these findings are reversed. Finally, we do not discern

any significant impact on the important outcome of access to permanent jobs, but we do find a positive yet weak effect on access to temporary jobs.

### **The role of social networks in cultural assimilation**

- Journal of Urban Economics---2017---Thierry Verdier,Yves Zenou

We develop a model where, in the first stage, minority individuals have to decide whether or not they want to assimilate to the majority culture while, in the second stage, all individuals (both from the majority and the minority group) embedded in a network have to decide how much effort they exert in some activity (say education). We show that the more central minority agents are located in the social network, the more they assimilate to the majority culture. We also show that denser networks tend to favor assimilation so that, for example, it is easier to assimilate in a complete network than in a star-shaped network. We show that the subgame-perfect equilibrium is not optimal because there is not enough activity and assimilation. We then endogeneize the network and show under which condition the ethnic minorities either assimilate to or separated themselves from the majority group.

## Spatial frictions

- Journal of Urban Economics---2017---Kristian Behrens, Giordano Mion, Yasusada Murata, Jens Suedekum

The world is replete with spatial frictions. Shipping goods across cities entails trade frictions. Commuting within cities causes urban frictions. How important are these frictions in shaping the spatial economy? We develop and quantify a multi-city general equilibrium model to address this question at three different levels: Do spatial frictions matter for the city-size distribution? Do they affect individual city sizes? Do they contribute to the productivity advantage of large cities and the toughness of competition in cities? The short answers are: no; yes; and it depends.

## Walled cities in late imperial China

- Journal of Urban Economics---2017---Yannis Ioannides, Junfu Zhang

For thousands of years, the Chinese and many other nations around the world built defensive walls around their cities. This phenomenon is not well understood from an economic perspective. We rationalize the existence of city walls by developing a simple model that relates the dimensions and quality of city walls to a set of economic and geographic variables. We report an empirical analysis using hand-collected and previously unutilized data on city walls in the Ming (1368–1644) and Qing (1644–1911) Dynasties. We find that the circumference of a city wall is correlated with local economic and geographic conditions, that wall size is positively correlated with population size in the jurisdiction, and that frontier cities subject to a higher probability of attack tend to have stronger city walls. We examine the physical size distribution of walled cities in late imperial China and show that city sizes above a certain cutoff follow a Pareto law, although the Pareto coefficient decreases algebraically with the cutoff point. This result complements findings in the existing literature that focuses almost exclusively on the population size distribution of cities. We also find that cities with walls in the past have higher

employment and population densities at the present time.

## Worker migration or job creation? Persistent shocks and regional recoveries

- Journal of Urban Economics---2016---Ryan Greenaway-McGrevy, Kyle K. Hood

Although a large body of literature has documented the role of household out-migration in the recovery from regional downturns, the role that firms play in the recovery process has remained a neglected topic of research. Firms may choose to locate new jobs in depressed regions, thereby reducing unemployment through the job creation channel. We present a new empirical model of regional adjustment that permits us to decompose recoveries into both household and firm responses to local economic conditions. The model features a set of auxiliary serial dependence parameters that are used to filter out persistency in the identified labor market shocks, so that changes in employment obtained from the fitted model only reflect the endogenous firm response of interest, and not the ongoing exogenous job destruction from the original downturn. We find that the labor demand response is two to three times larger than the labor supply response, meaning that local job creation—and not household out-migration—is the main driver of recoveries in the US. This result is robust to a variety of model specifications, identification strategies, and estimation methods.

## Spillovers, absorptive capacity and agglomeration

- Journal of Urban Economics---2016---Sergey Lychagin

I study knowledge spillovers in an industry where firms are heterogeneous in their ability to adopt knowledge (absorptive capacity). I set up a model in which firms choose locations anticipating potential gains and losses from other firms' R&D activity. I apply the model to the US software industry and obtain the following results: the data supports localized knowledge spillovers; firms that have higher absorptive capacity

are sorted into more agglomerated counties; ignoring firm heterogeneity leads to biased estimates of gains from spillovers; spillovers play an important role in explaining the geographic distribution of firms, but only within regions with high R&D activity.

### **The accident externality of driving: Evidence from observance of the Jewish Sabbath in Israel**

- Journal of Urban Economics---2016---Issi Romem,Ity Shurtz

We document and measure an externality of driving, whereby a driver's decision to take to the road affects fellow drivers risk of accident. Because religious Jews refrain from driving during the Sabbath, traffic on Israeli roads decreases sharply when the Sabbath begins each Friday, at a precisely defined time before sundown, and increases after the Sabbath ends on Saturday evening, at a precisely defined time after sunset. Using plausibly exogenous variation in traffic volume associated with the Sabbath, we estimate the effect of traffic volume on the risk of fatal or injurious accident. We find that a positive accident externality emerges only at the Sabbath exit, when traffic volumes are greater. Remarkably similar results arise when the analysis is confined to non-Jewish drivers, whose travel choices are not bound by the precise timing of the Sabbath, supporting the interpretation that our findings reflect an externality. Finally, the effect emerges mainly on a class of road sections that is considered highly perilous, suggesting that the interaction of traffic volume and road perilousness is important for understanding this issue and shaping implicated policy.

### **Housing price bubbles, new supply, and within-city dynamics**

- Journal of Urban Economics---2016---Crocker H. Liu,Adam Nowak,Stuart Rosenthal

Although there is broad recognition that cities differ in their tendency to experience house price bubbles, most studies assume away any possibility of within-city heterogeneity in response to a bubble. We develop a model that suggests that this assumption may be

appropriate when markets are rising but can be far from reality on the bust side of a bubble. During a housing boom, new construction and related supply adjustments by developers ensure stable relative prices between low- and high-quality segments of the housing market. On the bust side of a bubble, however, reduced housing starts allow demand-side forces and mortgage default to create pressure for relative prices to diverge across market segments. Absent a change in technology, as markets recover and new construction rebounds, relative prices should revert back to pre-crash levels. Evidence based on 2000–2013 single-family home sales in Phoenix, Arizona supports this modeling framework. Additional evidence also suggests that high rates of mortgage default contributed to divergence in relative prices when markets crashed.

### **Born on the wrong day? School entry age and juvenile crime**

- Journal of Urban Economics---2016---Briggs Depew,Ozkan Eren

Kindergarten entry age is known to impact schooling outcomes. Less is known, however, about the role of school starting age on economic outcomes outside of the classroom. In this paper we use administrative data from Louisiana to analyze the effect of school starting age on juvenile crime. We find that late school entry by one year reduces the incidence of juvenile crime for young black females, particularly in high crime areas. The mediating effects of late school entry for this subgroup appear to be driven by reductions in non-felony offenses. We propose age related differences in human capital accumulation as a potential explanation for our findings.

### **Mortgage default risk: New evidence from internet search queries**

- Journal of Urban Economics---2016---Marcelle Chauvet,Stuart Gabriel,Chandler Lutz

We use Google search query data to develop a broad-based and real-time index of mortgage default risk. Unlike established indicators, our Mortgage Default Risk

Index (MDRI) directly reflects households' concerns regarding their risk of mortgage default. The MDRI predicts housing returns, mortgage delinquency indicators, and subprime credit default swaps. These results persist both in- and out-of-sample and at multiple data frequencies. Together, research findings suggest internet search queries yield valuable new insights into household mortgage default risk.

### **Renewable energy and negative externalities:**

#### **The effect of wind turbines on house prices**

- Journal of Urban Economics---2016---Martijn Dröes,Hans R.A. Koster

In many countries, wind turbines are constructed as part of a strategy to reduce dependence on fossil fuels. In this paper, we measure the external effect of wind turbines on the transaction prices of nearby houses. A unique Dutch house price dataset covering the period 1985–2011 is used, as well as the exact location of all wind turbines that were built in the Netherlands. Using a difference-in-differences methodology we find a 1.4% price decrease for houses within 2km of a turbine. There is also evidence for anticipation effects a few years before placement of a turbine. The effect is larger for taller turbines and in urban areas. Especially the first turbine built close to a house has a negative effect on its price.

#### **A general-equilibrium analysis of airport pricing, capacity, and regulation**

- Journal of Urban Economics---2016---Yukihiro Kidokoro,Ming Hsin Lin,Anming Zhang

Using a general-equilibrium model that includes consumers, airlines, and an airport with both aeronautical services and non-aeronautical services, this study investigates the airport's decisions on its aeronautical charge and capacity, as well as the size of its non-aeronautical services. In contrast to the existing literature, we formally model an airport's non-aeronautical services by taking into account the endogenous determination of the size of the airport's non-aeronautical services.

First, we characterize the results for welfare maximization, and find that the self-financing property does not hold. Apart from carriers' market power as a source of the failure for the self-financing property, we identify the presence of non-aeronautical services as a new source. Further, we show that the common practice of cross-subsidizing from the non-aeronautical to aeronautical services is incompatible with welfare maximization because welfare maximization requires exact self-financing within the non-aeronautical sector. Second, we derive the results for profit maximization by a monopolistic airport, and demonstrate that the imposition of two taxes, one on the airport's aeronautical services and the other on its capacity investment, can recover the welfare-maximization results. Third, we analyze the two types of regulation, single till and dual till, which are often used in practice, and show that dual-till regulation yields higher welfare than single-till regulation, as long as the profit from non-aeronautical services is positive. This result is in contrast to the prevailing wisdom in the literature, which in general favors single-till regulation.

#### **Housing equity, residential mobility and commuting**

- Journal of Urban Economics---2016---Gintautas Bloze,Morten Skak

Highly productive economies require a flexible labor force with workers that move in accordance with the changing demand for goods and services. In times with falling housing prices, the mobility of home owning workers may be hampered by a lock-in effect of low or even negative housing equity. This paper explores the effect of housing equity on both the residential mobility and the commuting pattern of homeowners. We merge administrative registers for the Danish population and properties and get highly reliable micro data for our analysis. We find that low and negative housing equity substantially reduces residential mobility among homeowners. The negative effect of locked-in low equity families on labor market mobility may be mitigated by commuting. However, our results show that family heads in low or negative equity homes are not found

to commute more than households with higher housing equity, but also that a considerable fraction of home owning family heads commute. The analysis of the joint decision of homeowners to commute or move shows that the option of moving, as an alternative to not moving and not commuting, is chosen by five to six percent of homeowners with low housing equity, while the option of not moving but commuting is chosen by 60%.

### **Can buyer “mobility” reduce aggregation failures in land-assembly?**

- Journal of Urban Economics---2016---R. Isaac, Carl Kitchens, Javier E. Portillo

In this paper we examine whether site-development competition can be used to facilitate land assembly, in the absence of contingent contracts. In particular, we attempt to determine (1) whether competition can be induced among prospective sellers, (2) whether or not competition increases aggregation rates, and (3) what effects competition has on the distribution of surplus among the bargaining parties. We also study the incidence with which a buyer (endogenously) chooses to deal with a single “large parcel” owner vs. multiple “small parcel” owners. To do so, we make use of a laboratory experiment where all the relevant information about the project is common knowledge and landowner valuations are private information. Our results show that competition more than doubles aggregation rates, with aggregation rates of approximately 40% in the baseline, and at least 84% in the competitive treatments. We also find that developers have a strong preference to make transactions with landowners who have consolidated land holdings, doing so in 24/27 successful aggregations, providing empirical evidence that there is a link between the transactions cost associated with land-assembly and suburbanization, as suggested by Miceli and Sirmans (2007).

### **Charter school closure and student achievement: Evidence from Ohio**

- Journal of Urban Economics---2016---Deven Carlson, Stéphane Lavertu

The closure of low-performing schools is an essential feature of the charter school model. Our regression discontinuity analysis uses an exogenous source of variation in school closure—an Ohio law that requires charter schools to close if they fail to meet a specific performance standard—to estimate the causal effect of closure on student achievement. The results indicate that closing low-performing charter schools eventually yields achievement gains of around 0.2–0.3 standard deviations in reading and math for students attending these schools at the time they were identified for closure. The study also employs mandatory closure as an instrument for estimating the impact of exiting low-quality charter schools, thus providing plausible lower-bound estimates of charter school effectiveness. These results complement the more common lottery-based estimates of charter school effects, which likely serve as upper-bound estimates due to their focus on oversubscribed schools often located in cities with high-performing charter sectors. We discuss the implications for research and policy.

### **A field study of rental market discrimination across origins in France**

- Journal of Urban Economics---2016---Arthur Acolin, Raphael Bostic, Gary Painter

Discrimination against particular groups in the housing market increases search costs and limits optimal matching, thus resulting in economic and social inefficiencies. This paper tests for the existence of discrimination in the French rental market against individuals with names which signal their connection to five immigrant groups (Northern Africa, Sub-Saharan Africa, Turkey, Poland, Portugal-Spain) by implementing an online field study using one of France’s largest online advertisements website. The results show that applicants with foreign sounding names coming from Northern Africa, Sub-Saharan Africa and Turkey are 16 to 22 percentage points less likely to receive a response than applicants with French names or names associated with Poland, Portugal or Spain. In addition, when applicants with foreign sounding names from any origin receive a response, it is significantly more likely to be

negative or include a request for more information than responses to emails including French sounding names. Finally, we find some geographic differences in response rate differentials that are correlated with differences in the local income and share of immigrants. This provides evidence that landlords use names as a proxy for economic and other sociodemographic characteristics.

### **Optimal policies in cities with congestion and agglomeration externalities: Congestion tolls, labor subsidies, and place-based strategies**

- Journal of Urban Economics---2016---Wenjia Zhang,Kara M. Kockelman

This paper develops a spatial general equilibrium model that accommodates both congestion and agglomeration externalities, while firms' and households' land-use decisions are endogenous across continuous space. Focusing on the interaction between externalities and land use patterns, we examine the efficiencies of first-best policies and second-best pricing and place-based strategies using numerical simulations. A first-best policy must combine both Pigouvian congestion tolling (PCT) and Pigouvian labor subsidies (PLS) instruments, or design an optimal toll (or subsidy) internalizing agglomeration externalities (or congestion externalities). We also examine second-best pricing policies if only one instrument is adopted. Congestion pricing policies alone (e.g., a partial PCT or a flat-rate toll) can improve social welfare only in heavy-congestion cities, and their welfare gains may be insignificant (e.g., below 10% of the welfare improvement achieved by first-best policies). In contrast, second-best labor subsidy policies alone are a more effective alternative to first-best policies. As to place-based policies, the firm cluster zoning (FCZ) regulation is more efficient than the urban growth boundary (UGB) policy. UGBs only have small effects on the agglomeration economy but could worsen land market distortions via residential rent-escalation effects. These findings suggest that it is important to internalize business land use decisions and relax monocentricity assumptions, in order to appreciate the interplay of both urban externalities, since spatial adaptations to policy interventions can distort

system efficiencies.

### **Religious heterogeneity and fiscal policy: Evidence from German reunification**

- Journal of Urban Economics---2016---Ronny Freier,Benny Geys,Joshua Holm

Theoretical work based on social identity theory predicts that population diversity undermines redistributive public policies. This article tests this proposition exploiting an exogenous shock in diversity due to Germany's reunification. In contrast to previous work on ethno-linguistic or racial heterogeneity, we specifically analyze religious diversity, which is an increasingly relevant social cleavage in many countries. Our main results corroborate that increasing religious diversity leads to a change in fiscal policies in Bavarian municipalities over the 1983–2005 period. Moreover, we find some evidence of declining individual-level local identification over the post-reunification period, which suggests that the observed fiscal effects are indeed linked to the theoretical mechanism of individuals' social identification. Finally, we highlight an important mediating role for the democratic process, since the observed fiscal effects strengthen considerably following Bavarian municipalities' first local elections after the reunification migration wave (March 1996) and a legal change allowing local referenda on public policies (October 1995).

### **Congestion, agglomeration, and the structure of cities**

- Journal of Urban Economics---2016---Jeffrey Brinkman

Congestion costs in urban areas are significant and clearly represent a negative externality. Nonetheless, economists also recognize the production advantages of urban density in the form of positive agglomeration externalities. The long-run equilibrium outcomes in economies with multiple correlated but offsetting externalities have yet to be fully explored in the literature. Therefore, I develop a spatial equilibrium model of urban structure that includes both congestion costs

and agglomeration externalities. I then estimate the structural parameters of the model using a computational algorithm to match the spatial distribution of employment, population, land use, land rents, and commute times in the data. Policy simulations based on the estimates suggest that congestion pricing may have ambiguous consequences for economic welfare.

### **Modelling and forecasting mortgage delinquency and foreclosure in the UK**

- Journal of Urban Economics---2016---Janine Aron, John Muellbauer

In the absence of micro-data in the public domain, new aggregate models for the UK's mortgage repossessions and arrears are estimated using quarterly data over 1983–2014, motivated by a conceptual double trigger frame framework for foreclosures and payment delinquencies. An innovation to improve on the flawed but widespread use of loan-to-value measures, is to estimate difficult-to-observe variations in loan quality and access to refinancing, and shifts in lenders' forbearance policy, by common latent variables in a system of equations for arrears and repossessions. We introduce, for the first time in the literature, a theory-justified estimate of the proportion of mortgages in negative equity as a key driver of aggregate repossessions and arrears. This is based on an average debt–equity ratio, corrected for regional deviations, and uses a functional form for the distribution of the debt–equity ratio checked on Irish micro-data from the Bank of Ireland, and Bank of England snapshots of negative equity. We systematically address serious measurement bias in the 'months-in-arrears' measures, neglected in previous UK studies. Highly significant effects on aggregate rates of repossessions and arrears are found for the aggregate debt–service ratio, the proportion of mortgages in negative equity and the unemployment rate. Economic forecast scenarios to 2020 highlight risks faced by the UK and its mortgage lenders, illustrating the usefulness of the approach for bank stress-testing. For macroeconomics, our model traces an important part of the financial accelerator: the feedback from the housing market to bad loans and hence banks' ability

to extend credit.

### **School district and housing price responses to fiscal stress labels: Evidence from Ohio**

- Journal of Urban Economics---2016---Paul N. Thompson

This paper examines the effect of the Ohio fiscal stress labeling system on school district outcomes and housing prices. Under this policy, financially troubled districts are labeled and required to implement financial recovery plans. In response to these plans, districts increase local tax revenues and decrease capital and operating expenditures. Although these recovery plans lead to better long-term financial health for school districts, there appear to be some negative impacts on welfare in these districts during the duration of the label. I find that residential home sale prices fall following fiscal stress label receipt, but rise again once the label is removed. These districts also undergo substantial restructuring, including reductions in enrollments, teachers, and schools, which coincide with a transitory reduction in math proficiency rates following label receipt.

### **Does size matter? Educational attainment and cohort size**

- Journal of Urban Economics---2016---Rune Borgan Reiling

Motivated by education expenditure studies consistently finding that education expenditures per student decrease in cohort size, I investigate the relationship between cohort size and the probability of graduating from upper secondary education. If resources are important for student performance, education expenditure studies suggest that being part of a large cohort is a disadvantage. Using a 24-year panel of Norwegian municipalities, I find a small positive effect of cohort size on the probability of graduation, suggesting that being part of a large cohort is actually beneficial. These results are robust to several checks, including accounting for possible Tiebout sorting across school districts and using birth cohort size as an instrument for cohort

size in an IV approach. While the analyses conducted in this paper are unable to shed light on whether reduced spending per student actually hurts student outcomes, they indicate that a potential adverse effect of cohort size, working through educational resources, is not strong enough to offset the beneficial effect of larger cohorts on student performance.

### **Metro business cycles**

- Journal of Urban Economics---2016---Maria A. Arias, Charles Gascon, David E. Rapach

We construct monthly economic activity indices for the 50 largest U.S. metropolitan statistical areas (MSAs) beginning in 1990. Each index is derived from a dynamic factor model based on twelve underlying variables capturing various aspects of metro area economic activity. To accommodate mixed-frequency data and differences in data-publication lags, we estimate the dynamic factor model using a maximum-likelihood approach that allows for arbitrary patterns of missing data. Our indices highlight important similarities and differences in business cycles across MSAs. While a number of MSAs experience sizable recessions during the national recessions of the early 1990s and early 2000s, other MSAs escape recessions altogether during one or both of these periods. Nearly all MSAs suffer relatively deep recessions near the recent Great Recession, but we still find significant differences in the depth of recent metro recessions. We relate the severity of metro recessions to a variety of MSA characteristics and find that MSAs with less-educated populations and less elastic housing supplies experience significantly more severe recessions. After controlling for national economic activity, we also find significant evidence of dynamic spillover effects in economic activity across MSAs.

### **Are PILOTs property taxes for nonprofits?**

- Journal of Urban Economics---2016---Fan Fei, James Hines, Jill R. Horwitz

Nonprofit charitable organizations are exempt from most taxes, including local property taxes, but U.S.

cities and towns increasingly request that nonprofits make payments in lieu of taxes (known as PILOTs). Strictly speaking, PILOTs are voluntary, though nonprofits may feel pressure to make them, particularly in high-tax communities. Evidence from Massachusetts indicates that PILOT rates, measured as ratios of payments to the value of local tax-exempt property, are higher in towns with higher property tax rates: a one percentage point higher property tax rate is associated with a 0.2 percentage point higher PILOT rate. PILOTs appear to discourage nonprofit activity: a one percentage point higher PILOT rate is associated with 0.8% lower real property ownership by local nonprofits, 0.2% lower total assets, and 0.2% lower revenues of local nonprofits. These patterns are consistent with voluntary PILOTs acting in a manner similar to low-rate, compulsory real estate taxes.

### **Why truck distance taxes are contagious and drive fuel taxes to the bottom**

- Journal of Urban Economics---2016---Svante Mandell, Stef Proost

This paper analyzes the way in which countries with international and local truck traffic decide to switch from a simple fuel tax system to a dual system of fuel and distance charge taxes. We show what drives a country to switch and how this affects the level of fuel taxes as well as incentives for other countries to also adopt the dual system. The model is partially able to explain the gradual extension of kilometer charging for trucks in Europe. The model also shows that, in the absence of diesel cars, the gradual introduction of kilometer charges will make fuel taxation for trucks virtually disappear and will lead to a system where truck use is (1) taxed mainly based on distance, (2) is taxed too heavily, and (3) where highest distance taxes are expected in transit countries with a strong market position. When the fuel tax must in addition serve as an externality tax for diesel cars, the introduction of distance charges for trucks will give rise to diesel taxes that are lower than the external cost of diesel cars. For trucks, this leads to a sum of diesel taxes and distance charges that are higher than the external cost



of trucks.

### **How do politicians save? Buffer-stock management of unemployment insurance finance**

- Journal of Urban Economics---2016---Steven Craig, Wided Hemissi, Satadru Mukherjee, Bent Sorensen

We fit an empirical structural model of forward looking government savings behavior to data from the U.S. state Unemployment Insurance (UI) programs 1976–2008. States increase benefits or lower taxes when Unemployment Trust fund balances are high, consistent with a desired target level of savings. This can be explained by the representative state program behaving like a Carroll (1992) buffer-stock consumer who trades off a desire to expend savings (impatience) against the fear of running out of funds (risk aversion). We calibrate the model to the data and find that statistics from model simulations match similar statistics produced from the data for reasonable levels of risk aversion and impatience.

### **Neighborhood effects on secondary school performance of Latino and African American youth: Evidence from a natural experiment in Denver**

- Journal of Urban Economics---2016---George Galster, Anna Santiago, Lisa Stack, Jackie Cutsinger

We quantify the relationships between measures of neighborhood context and school performance (repeating a grade, grade point average and dropping out before a diploma is earned) for low-income Latino and African American adolescents ages 12–18. We employ administrative and survey data from a natural experiment involving the Denver Housing Authority's public housing program to minimize geographic selection bias and provide wide variation in neighborhood contexts. We use characteristics of the neighborhood initially offered by DHA to waiting list applicants as identifying instruments for the neighborhood context experienced as an adolescent. Cox proportional hazard

models (OLS in the case of grades) demonstrate that neighborhoods having less social vulnerability, higher occupational prestige and lower percentages of African American residents robustly predict superior secondary educational performance in one or more dimensions, though magnitudes are typically contingent on ethnicity.

### **Decentralized redistribution in a laboratory federation**

- Journal of Urban Economics---2016---Ana Ania, Andreas Wagener

The idea of laboratory federalism provides a strong argument in favor of fiscal decentralization. It views autonomous jurisdictions in a federation as laboratories where new policies can be tested at low risk for the entire system. If successful, these policies will spread out by imitation; otherwise, they will be discarded. Studying this idea in a dynamic setting of fiscal competition, we show that, due to externalities between jurisdictions, policies that appear successful and are therefore mimicked do not necessarily enhance welfare, and vice versa. Specifically, in the classical framework of decentralized, rich-to-poor income redistribution with labor mobility the long-run outcome entails a complete breakdown of redistribution with zero subsidies to the poor everywhere.

### **Payment changes and default risk: The impact of refinancing on expected credit losses**

- Journal of Urban Economics---2016---Joseph Tracy, Joshua Wright

This paper analyzes how access to credit and the path of mortgage rates can affect borrower credit risk. This is a crucial issue for evaluating refinance programs as a form of loss mitigation, and it became prominent in the debates around the Treasury Department's Home Affordable Refinance Program (HARP). These debates exposed gaps in the literature on the relationship between credit performance and changes in borrowers' monthly mortgage payments. Since then, several new studies have attempted to fill these holes, each pursuing

a different methodology. In this paper, we review the relevant debates and look at what downward adjustments in prime adjustable-rate mortgages can tell us about modifications of prime fixed-rate mortgages. We argue that this method better addresses the various sampling biases that plague all attempts to predict HARP's impact. Our analysis indicates that typical monthly payment reductions under HARP would reduce credit losses by 56 basis points.

### **The urban density premium across establishments**

- Journal of Urban Economics---2016---Jason Faberman,Matthew Freedman

We use longitudinal establishment data to estimate the urban density premium for U.S. establishments, controlling for observed establishment characteristics and dynamic establishment behavior. Consistent with previous studies, we find an elasticity of average establishment earnings with respect to metropolitan area population of 0.03, controlling for the endogeneity of location and establishment and metropolitan area characteristics. More importantly, we find that the estimated density premium is realized almost entirely at entry and is constant over an establishment's life. We find little evidence that the endogenous entry or exit of establishments can account for any of the estimated density premium. We interpret our results as implying that the returns to agglomeration diffuse within a city through a reallocation channel rather than through an increase in the productivity of existing firms.

### **Disentangling property value impacts of environmental contamination from locally undesirable land uses: Implications for measuring post-cleanup stigma** **Author-Name: Taylor, Laura O**

- Journal of Urban Economics---2016---Daniel Phaneuf,Xiangping Liu

This research seeks to identify the impact of environmental contamination on residential housing prices separate from land use externalities associated with

the contaminated sites. This is possible in an empirical model that considers the influence of uncontaminated commercial properties on home values concurrently with contaminated property influences. Our approach addresses an important source of omitted variable bias that has not been fully recognized in the literature, and it allows identification of stigma effects in a way not possible in past studies. We estimate difference-in-differences models that pool observations across a metro area and across time, as well as repeat sales models that rely on multiple transactions per home. Results indicate that environmental contamination more than doubles the negative influence commercial properties have on neighboring residential home values. Furthermore, we find little evidence of stigma effects once a contaminated site is remediated. The negative spillover effects associated with remediated contaminated sites are largely indistinguishable from the spillover effects from commercial properties with no known contamination.

### **Clean money, dirty system: Connected landowners capture beneficial land rezoning**

- Journal of Urban Economics---2016---Cameron Murray,Paul Frijters

We use a unique regulatory event that occurred in Queensland, Australia, from 2007 to 2012, to examine the predictive power of landowner relationship networks and lobbying behaviour on successfully gaining value-enhancing rezoning. A State authority, the Urban Land Development Authority (ULDA), took planning control away from local councils in selected areas in order to increase the speed and scale of development in those areas, in the process increasing land values. Using micro-level relationship data from multiple sources, we compare the relationship-network characteristics of landowners of comparable sites inside and outside the ULDA areas, finding that 'connected' landowners owned 75% of land inside the rezoned areas, and only 12% outside, capturing \$410 million in land value gains out of the total \$710 million from rezoning. We also find that engaging a professional lobbyist is a substitute for having one's own connections. Scaling up

from our sample of six rezoned areas to the hundreds of rezoning decisions across Queensland and Australia in the last few decades, suggests that many billions of dollars of economic rent are being regularly transferred from the general population to connected landowners through political rezoning decisions.

### **What is the role of the asking price for a house?**

- Journal of Urban Economics---2016---Lu Han,William Strange

This paper considers the role of the asking price in housing transactions both theoretically and empirically. Significant fractions of housing transactions involve sales prices that are either below or above asking price, which might suggest that asking price has limited relevance. However, many housing transactions involve a sales price exactly equal to asking price (a fact that has previously drawn little notice), strongly suggesting that asking price does matter. The paper develops a model where asking price is neither a binding commitment nor a ceiling, yet still directs buyer search and impacts sales price. Using novel survey data, the paper provides empirical evidence consistent with asking price playing a directing role in buyer search. Consistent with theory, this effect is stronger for more atypical houses and in bust markets.

### **Highways and productivity in manufacturing firms**

- Journal of Urban Economics---2016---Adelheid Holl

Using a geo-coded micro-level panel dataset for Spanish manufacturing firms, I estimate the effect of access to highways on firm-level productivity. To identify the causal effect of highways, I have relied on different fixed-effects specifications, instrumental variables and controls for geography, geology and history. Since highways also attract economic activity, leading to local density increases, which in turn could affect productivity through agglomeration benefits, I also present estimations that control for local employment densities. The results show that highways raise firm-level

productivity directly and beyond the effect of density. Additional results show that highway benefits are unevenly distributed across sectors and space.

### **Effects of a mileage tax for trucks**

- Journal of Urban Economics---2016---Simon Luechinger,Florian Roth

We evaluate the effect of the introduction of a mileage tax for trucks in Switzerland in 2001 on traffic volume and externalities. Using a regression discontinuity design, we find a reduction in overall truck traffic of around 4-6%, no effects on car traffic and time-shifted placebos, suggestive evidence for traffic substitution toward rail, and negative effects on nitrogen oxides at curbside monitors. Complementary estimates on the effects of the German mileage tax and complementary estimates based on the synthetic control method are broadly consistent with our main results, although the latter are not statistically significant. Depending on prevailing levels of transportation costs, mileage tax-induced transportation cost increases may accelerate or reverse spatial economic concentration processes. Such implications for economic geography featured prominently in Switzerland and are a promising area for future research.

### **Preserving history or restricting development? The heterogeneous effects of historic districts on local housing markets in New York City**

- Journal of Urban Economics---2016---Vicki Been,Ingrid Gould Ellen,Michael Gedal,Edward Glaeser,Brian J. McCabe

Since Brooklyn Heights was designated as New York City's first landmarked neighborhood in 1965, the Landmarks Preservation Commission has designated 120 historic neighborhoods in the city. This paper develops a theory in which landmarking has heterogeneous impacts across neighborhoods and exploits variation in the timing of historic district designations in New York City to identify the effects of preservation policies on residential property markets. We combine data on residential transactions during the 35-year period between

1974 and 2009 with data from the Landmarks Preservation Commission on the location of the city's historic districts and the timing of the designations. Consistent with theory, properties just outside the boundaries of districts increase in value after designation. Further, designation raises property values within historic districts, but only outside of Manhattan. As predicted, impacts are more positive in areas where the value of the option to build unrestricted is lower. Impacts also appear to be more positive in districts that are more aesthetically appealing.

### **Discrimination in mortgage lending: Evidence from a correspondence experiment**

- Journal of Urban Economics---2016---Andrew Hanson,Zackary Hawley,Hal Martin,Bo Liu

We design and implement an experimental test for differential response by mortgage loan originators (MLOs) to requests for information about loans. Our e-mail correspondence experiment is designed to analyze differential treatment by client race and credit score. Our results show net discrimination by 1.8% of MLOs through non-response. We also find that MLOs offer more details about loans and are more likely to send follow up correspondence to whites. The effect of being African American on MLO response is equivalent to the effect of having a credit score that is 71 points lower.

### **Co-invention networks and inventive productivity in US cities****Author-Name: Breschi, Stefano**

- Journal of Urban Economics---2016---Camilla Lenzi

The role of collaboration networks within and across cities as drivers of urban creativity and new knowledge creation is increasingly acknowledged in the literature. We propose that the combination of (1) high internal social proximity between co-inventors within a city and (2) local cliques of inventors in which interaction is dense allows a city to achieve greater inventive creativity. Internal social proximity allows knowledge to circulate quickly across a larger pool of sources; dense cliques promote trust, cooperation, and a more effective

use of the acquired knowledge. Moreover, social proximity between a city's inventors and inventors outside the city contributes to enriching and renewing a city's knowledge base by facilitating faster access to fresh external knowledge. We find evidence to support these propositions in a study of the inventive productivity of 331 US cities.

### **An evaluation of the Federal Legal Services Program: Evidence from crime rates and property values**

- Journal of Urban Economics---2016---Jamein P. Cunningham

This paper uses the city-level roll-out of legal service grants to evaluate their effects on crime. Using Uniform Crime Reports from 1960 to 1985, the results show that there is a short-run increase of 7% in crimes reported and a 16% increase in crimes cleared by arrest. Results show an increase in the staffing of police officers in cities that received legal services. These cities are also associated with having higher median property values 10 years later. This supports the narrative that legal services changed police behavior through litigation or threats of litigation.

### **Households' willingness to pay for public housing**

- Journal of Urban Economics---2016---Jos van Ommeren,Arno van der Vlist

In the presence of price controls, nonmarket housing allocation mechanisms such as queueing prevent households from revealing their marginal willingness to pay for housing through market prices. We derive the households' marginal willingness to pay using the intuitive idea that the length of the queue for a specific house reflects the households' willingness to pay for housing characteristics. We apply our methodology to public housing in the Amsterdam Metropolitan area and show that, on average, the households' marginal willingness to pay for a unit of public housing is close to its marginal costs. This suggests that the welfare loss

of public housing through distortions in housing supply is rather limited and is mainly through distortions in housing demand. We provide indirect evidence of the latter by showing that queueing induces inefficient matching of households and housing.

### **Does public transit reduce car travel externalities? Quasi-natural experiments' evidence from transit strikes**

- Journal of Urban Economics---2016---Martin W. Adler,Jos van Ommeren

One of the unanswered questions in the field of urban economics is to which extent subsidies to public transit are justified. We examine one of the main benefits of public transit, a reduction in car congestion externalities, the so-called congestion relief benefit, using quasi-natural experimental data on citywide public transit strikes for Rotterdam, a city with mild congestion levels. On weekdays, a strike induces travel times to increase only marginally on the highway ring road (0.017min/km) but substantially on inner city roads (0.224min/km). During rush hour, the strike effect is much more pronounced. The congestion relief benefit of public transit is substantial, equivalent to about 80% of the public transit subsidy. We demonstrate that during weekends, travel time does not change noticeably due to strikes. Furthermore, we show that public transit strikes induce similar increases in number of cyclists as number of car travelers suggesting that bicycling-promoting policies to reduce car congestion externalities might be attractive in combination with first-best congestion pricing.

### **Negative home equity, economic insecurity, and household mobility over the Great Recession**

- Journal of Urban Economics---2016---Jesse Bricker,Brian Bucks

This paper uses data from the 2007–09 Survey of Consumer Finances panel to examine U.S. households' decisions to move during the Great Recession and the role of negative home equity and economic shocks, such as job loss, in these decisions. The recession's effects

are nonetheless apparent in the notable fraction of homeowners who moved involuntarily due to, for example, foreclosure. Many involuntary moves appear to stem from a combination of negative home equity and adverse economic shocks rather than negative equity alone. Homeowners with both negative equity and economic shocks were substantially more likely to have moved between 2007 and 2009 and to have moved involuntarily. The findings suggest that, analogous to the double-trigger theory of default, the relationship between negative equity and household mobility varies with households' exposure to adverse shocks.

### **Agglomeration within an urban area**

- Journal of Urban Economics---2016---Stephen B. Billings,Erik Johnson

This paper utilizes a newly created index for colocalization to estimate the determinants of industrial agglomeration within a single urban area. Our new index directly incorporates the location of individual establishments while controlling for the Modifiable Areal Unit Problem (MAUP) in order to create this measure of spatial similarity between two industries. We estimate that proximity to transportation infrastructure and consumers as well as knowledge spillovers largely explain patterns of agglomeration. We find a smaller role for input–output linkages and consumption externalities for retail and consumer service industries.

### **Workforce location and equilibrium unemployment in a duocentric economy with matching frictions**

- Journal of Urban Economics---2016---Etienne Lehmann,Paola Liliana Montero Ledezma,Bruno Van der Linden

This article examines unemployment disparities and efficiency in a duocentric city where workers are non-uniformly distributed between the two job centers. We introduce commuting costs and search-matching frictions to deal with the spatial mismatch between workers and firms. In a decentralized economy job-seekers do not internalize a composition externality they impose

on all the unemployed. With symmetric job centers, a change in the distribution of the workforce can lead to asymmetric equilibrium outcomes. We calibrate the model for Los Angeles and Chicago Metropolitan Statistical Areas. Simulations suggest that changes in the workforce distribution have non-negligible effects on unemployment rates, wages, and net output, but cannot be the unique explanation of a substantial mismatch problem.

### **Do land use regulations stifle residential development? Evidence from California cities**

- Journal of Urban Economics---2016---Kristoffer Jackson

This paper estimates the extent to which the supply of new housing is restricted by land use regulations using a panel of California cities from 1970–1995. While land use regulation is found to significantly reduce residential development, estimates from fixed effects regressions are about 50–75% smaller than those from pooled regressions. Using the two-way fixed effects model, the implementation of an additional regulation is found to reduce residential permits by an average of 4%, which comes through reductions in both multi-family and single-family permits. Of the regulations measured, those categorized as zoning and general controls have the strongest effects. The partial effects of individual regulations show that while some significantly reduce development, others have a large positive impact.

### **A journey home: What drives how long people are homeless?**

- Journal of Urban Economics---2016---Deborah Cobb-Clark,Nicolas Hérault,Rosanna Scutella,Yi-Ping Tseng

This paper uses survival analysis to model exits from two alternative forms of homelessness: sleeping on the streets ( ‘literal homelessness’ ) and not having a home of one’s own ( ‘housing insecurity’ ). We are unique in being able to account for time-invariant, unobserved heterogeneity. Like previous researchers, we

find results consistent with negative duration dependence in models which ignore unobserved heterogeneity. However, controlling for unobserved heterogeneity, we find that duration dependence has an inverted U-shape with exit rates initially increasing (indicating positive duration dependence) and then falling. Exit rates out of both literal homelessness and housing insecurity fall with age. Women are more likely than men to exit housing insecurity for a home of their own, but are less likely to exit literal homelessness. Persons with dependent children have higher exit rates. Finally, education seems to protect people from longer periods of housing insecurity.

### **Intergenerational conflict and the political economy of higher education funding**

- Journal of Urban Economics---2016---Eric J. Brunner,Erik Johnson

We examine how a population’s age distribution and a growing divide between the ethnic composition of older and young generations is likely to affect support for higher education funding. Using detailed survey data on voter preferences for higher education funding and precinct-level vote returns from locally-funded community college bond referenda in California, we find that older voters are significantly less supportive of higher education funding than younger voters and that support among older non-Hispanic white voters is particularly weak when those voters reside in a jurisdiction where the college-age population is more heavily Hispanic.

### **Do charter schools crowd out private school enrollment? Evidence from Michigan**

- Journal of Urban Economics---2016---Rajashri Chakrabarti,Joydeep Roy

Charter schools have been one of the most important dimensions of recent school reform measures in the United States. Though there have been numerous studies on the effects of charter schools, these have mostly been confined to analyzing their effects on student achievement, student demographic composition,

parental satisfaction, and the competitive effects on traditional public schools. This study departs from the existing literature by investigating the effect of charter schools on enrollment in private schools. To investigate this issue empirically, we focus on the state of Michigan where there was a significant spread of charter schools in the nineties. Using data on private school enrollment from biennial NCES private school surveys, and using a fixed effects as well as an instrumental variables strategy that exploits exogenous variation from Michigan charter law, we investigate the effect of charter school penetration on private school enrollment. We do not find any causal evidence that charter schools led to a decline in enrollment in the private schools. Further, we do not find evidence that enrollments in Catholic or other religious schools were affected differently from those in non-religious private schools. Our results are robust to a variety of sensitivity checks.

### **Does the market value value-added? Evidence from housing prices after a public release of school and teacher value-added**

- Journal of Urban Economics---2016---Scott Imberman, Michael Lovenheim

Value-added data have become an increasingly common evaluation tool for schools and teachers. Many school districts have begun to adopt these methods and have released results publicly. In this paper, we use the unique public release of value-added data in Los Angeles to identify how this measure of school quality is capitalized into housing prices. Via difference-in-differences, we find no evidence of a response to either school or teacher value-added rank, even though school-zone boundary fixed-effects estimates indicate that test score levels are capitalized into home prices. Given ample evidence that this information was new to residents, widely dispersed, and easily available, our results suggest that people did not significantly value it on the margin. This has implications for the effectiveness of providing value-added information as a tool to help parents choose schools.

### **Local fiscal competition: An application to sales taxation with multiple federations**

- Journal of Urban Economics---2016---David Agrawal

Local sales tax rates influence the location of retail activity. This paper develops a theory and empirical identification strategy for studying sales tax competition with “multiple federations,” as exemplified by multiple counties each containing several cities. In addition to strategic interactions with nearby cities and a city’s own county, city tax rates are influenced by the tax rates of neighboring counties. Cities react heterogeneously to own-county sales tax rates depending on distance to the county border. Using data on the driving time to county borders and a comprehensive cross-section of local sales tax rates, I exploit variation in proximity to county borders to identify vertical fiscal competition. Cities located near county borders react more intensely to their county’s tax rate in comparison to towns at the interior. An increase in the neighboring county tax rate raises city tax rates in nearby counties.

### **When does delinquency result in neglect? Mortgage distress and property maintenance**

- Journal of Urban Economics---2015---Lauren Lambie-Hanson

Numerous studies have found that foreclosed properties sell at a discount and push down the sale prices of nearby properties, which may be partly driven by poorer maintenance of the foreclosed homes. However, direct evidence of foreclosure-related property neglect has been scarce. This paper uses data on constituent complaints and requests for public services made to the City of Boston to examine the incidence and timing of this type of foreclosure externality. Interior and exterior property conditions appear to suffer most while homes are bank owned, although complaints about reduced maintenance are also common earlier in the foreclosure process.

## **An analysis of default risk in the Home Equity Conversion Mortgage (HECM) program**

- Journal of Urban Economics---2015---Stephanie Moulton,Donald Haurin,Wei Shi

While reverse mortgages are intended as a tool to enable financial security for older homeowners, in 2014, nearly 12 percent of reverse mortgage borrowers in the federally insured Home Equity Conversion Mortgage (HECM) program were in default on their property taxes or homeowners insurance. Unlike the traditional mortgage market, there were no risk-based underwriting guidelines for HECMs through 2014. In response to the relatively high default rate, a variety of policy responses were implemented, including establishing underwriting guidelines. However, there is a lack of data and analysis to inform such criteria. Our analysis follows 30,000 seniors counseled for reverse mortgages between 2006 and 2011. The data includes comprehensive financial and credit report attributes, not typically available in analyses of reverse mortgage borrowers. Using a bivariate probit model that accounts for selection, we estimate the likelihood of tax and insurance default. Financial characteristics that increase default risk include the percentage of funds withdrawn in the first month of the loan, a lower credit score, higher property tax to income ratio, low or no unused revolving credit, and a history of being past due on mortgage payments or having a tax lien on the property. Our estimate of the elasticity of default with respect to credit scores is similar to that for closed-end home equity loans, but higher than that for HELOCs. We simulate the effects of alternative underwriting criteria and policy changes on the probability of take-up and default. Reductions in the default rate with a minimal effect on participation can be achieved by requiring that participants with low credit scores set aside some of their HECM funds for future property tax and insurance payments, a form of escrowing.

## **The energy implications of city size and density**

- Journal of Urban Economics---2015---William Larson,Anthony Yezer

This paper develops a new open-city urban simulation model capable of showing the urban form and energy consumption effects of variation in city size. The model is able to consider city size differences caused by wage and amenity differentials, both with and without housing and land use regulation. The surprising conclusion is that per-capita energy use is relatively invariant to city size when growth is driven by wages but falls modestly with growth induced by rising amenity. Common land use policies, specifically density limits and greenbelts, can positively or negatively affect both city welfare and energy use.

## **Impact of electronic road pricing on real estate prices in Singapore**

- Journal of Urban Economics---2015---Sumit Agarwal,Kang Mo Koo,Tien Foo Sing

Since 1998, Singapore has had an Electronic Road Pricing (ERP) system set up with a network of toll gantries to tax vehicles entering designated areas in the city center during peak hours. Using the congestion rate hike with effect from November 1, 2010 as an exogenous shock, we test the effects of the ERP rate hike on retail, office and residential real estate prices. The results show that the November 2010 congestion toll rate increases cause a 19% drop in retail real estate prices within the cordon ERP areas relative to retail real estate prices outside the cordon ERP areas. The results are statistically and economically significant. However, the toll rate hike has no significant impact private office and residential real estate within cordoned ERP areas. The robustness and falsification tests could not reject the negative effects associated with the toll rate hike on retail real estate prices.

## **Information technology and product variety in the city: The case of food trucks**

- Journal of Urban Economics---2015---Elliot Anenberg,Edward Kung

Using the food truck industry as the setting, we provide direct evidence for how information technology can complement consumption variety in cities by reducing



spatial information frictions associated with locally produced goods. We document the following facts: (1) food trucks use technology to overcome a spatial information friction; (2) proliferation of technology is related to growth in food trucks; (3) food trucks use their mobility to respond to consumer taste-for-variety; and (4) growth in food trucks is positively correlated with growth in food expenditures away from home. Taken together, our results illustrate how information technology can provide a meaningful increase in variety for urban consumers.

### **Do natural disasters cause an excessive fear of heights? Evidence from the Wenchuan earthquake**

- Journal of Urban Economics---2015---Guoying Deng,Li Gan,Manuel Hernandez

This paper uses the 2008 Wenchuan earthquake in China to examine if the occurrence of a natural disaster can cause an excessive fear of living in upper floors. We rely on potential variations in earthquake risk perceptions by floor level to assess whether the pricing of apartments in lower versus upper floors is consistent with a disproportionate fear of heights. We use a unique transaction dataset for new apartment units in the affected area. We find that the relative price of low to high floor units, particularly units located in the first and second floor, considerably increased for several months after the earthquake and then returned back to the levels observed prior to the tremor. This temporal increase in relative prices is in line with a higher risk perception and fear, triggered after the earthquake, of living in upper floors, which gradually dissipated over time. The results are robust to alternative model estimations.

### **On the spatial scale of industrial agglomerations**

- Journal of Urban Economics---2015---Tomoya Mori,Tony E. Smith

Standard approaches to studying industrial agglomeration have been in terms of scalar measures of agglomeration within each industry. But such measures often

fail to distinguish spatial scales of agglomeration. In a previous paper, Mori and Smith (2014) proposed a pair of quantitative measures for distinguishing both the scale and degree of industrial agglomeration based on an explicit method for detecting spatial clusters. The first, designated as the global extent of industrial clusters, measures the spatial spread of these clusters in terms of the areal size of their essential containment, defined to be the (convex-solid) region containing the most significant subset of these clusters. The second, designated as the local density of industrial clusters, measures the spatial extent of individual clusters within their essential containment in terms of the areal share of that containment occupied by clusters. The present paper applies this pair of measures to manufacturing industries in Japan, and the results obtained are systematically compared to those of the most prominent scalar measures currently in use. Finally, these measures are shown to support certain predictions of new economic geography models concerning the relationship between shipment distances and spatial scales of agglomeration for individual industries.

### **Industry localization, distance decay, and knowledge spillovers: Following the patent paper trail**

- Journal of Urban Economics---2015---Octávio Figueiredo,Paulo Guimaraes,Douglas Woodward

This paper investigates Alfred Marshall' s hypothesis that knowledge spillovers increase where industries are localized. At the same time, we take a fresh look at the role of distance in the diffusion of knowledge spillovers. Relying on a cited-citing gravity-like equation with high-dimensional fixed effects that control for multiple sources of observed and non-observed heterogeneity, we implement a Poisson pseudo-maximum-likelihood (PPML) estimator. We find that knowledge spillovers correlate positively with industry localization and that the agglomeration of an industry can offset the adverse effect of distance. The results also corroborate the distance decay effect uncovered in earlier research. Our new approach to estimate the PPML with two high-dimensional fixed effects should prove valuable

in applications to a variety of other problems in economics, such as the estimation of gravity equations widely used in modeling migration, trade and other flows among countries and regions.

### **On revenue recycling and the welfare effects of second-best congestion pricing in a monocentric city**

- Journal of Urban Economics---2015---Ioannis Tikoudis,Erik Verhoef,Jos van Ommeren

This paper examines congestion taxes in a monocentric city with pre-existing labor taxation. When road toll revenue is used to finance labor tax cuts, 35% of the optimal road tax in our numerical model does not reflect marginal external congestion costs, but rather functions as a Ramsey–Mirrlees tax, i.e. an efficiency enhancing mechanism allowing for an indirect spatial differentiation of the labor tax. This adds a quite different motivation to road pricing, since welfare gains can be produced even in absence of congestion. We find that the optimal road tax is non-monotonic across space, reflecting the different impacts of labor supply elasticity and marginal utility of income, which both vary over space. The relative efficiencies of some archetype second-best pricing schemes (cordon toll, flat kilometer tax) are high (84% and 70% respectively). When road toll revenue is recycled lump-sum, the optimal toll lies below its Pigouvian level. Extensions in a bimodal framework show that the optimality of using road toll revenue to subsidize public transport depends on the initial inefficiency in public transport pricing.

### **Razing San Francisco: The 1906 disaster as a natural experiment in urban redevelopment**

- Journal of Urban Economics---2015---James Siodla

Urban developers face frictions in the process of redeveloping land, the timing of which depends on many economic factors. This timing can be disrupted by a large shock that destroys thousands of buildings, which could then have substantial short-run and long-run effects. Studying the impact of an urban disaster,

therefore, can provide unique insight into urban dynamics. Exploiting the 1906 San Francisco Fire as an exogenous reduction in the city's building stock, this paper examines residential density across razed and unburned areas between 1900 and 2011. In prominent residential neighborhoods, density increased at least 60 percent in razed areas relative to unburned areas by 1914, and a large density differential still exists today. These outcomes suggest that thriving cities face substantial redevelopment frictions in the form of durable buildings and that large shocks can greatly alter the evolution of urban land-use outcomes over time.

### **The effects of road pricing on driver behavior and air pollution**

- Journal of Urban Economics---2015---Matthew Gibson,Maria Carnovale

Exploiting the natural experiment created by an unanticipated court injunction, we evaluate driver responses to road pricing. We find evidence of intertemporal substitution toward unpriced times and spatial substitution toward unpriced roads. The effect on traffic volume varies with public transit availability. Net of these responses, Milan's pricing policy reduces air pollution substantially, generating large welfare gains. In addition, we use long-run policy changes to estimate price elasticities.

### **Driving to opportunity: Local rents, wages, commuting, and sub-metropolitan quality of life**

- Journal of Urban Economics---2015---David Albouy,Bert Lue

We examine variation in local rents, wage levels, commuting costs, household characteristics, and amenities within metropolitan areas, for 2071 areas covering the United States, by density and central-city status. We demonstrate the sensibility of estimating wage levels by workplace, not residence, and recover decentralized rent gradients that fall with commuting costs. We construct and map a willingness-to-pay index, which indicates the quality of life typical households receive

from local amenities when households are similar, mobile, and informed. This index varies considerably within metros, and is typically high in areas that are dense, suburban, sunny, mild, safe, entertaining, and have elevated school-funding.

### **The effects of location-based tax policies on the distribution of household income: Evidence from the federal Empowerment Zone program**

- Journal of Urban Economics---2015---Curtis Reynolds, Shawn M. Rohlin

Location-based tax policies are redistributive as evidenced by their placement in distressed areas. However, the previous literature has focused on mean effects which can mask important effects that the program has on the distribution of households. Therefore, we extend the literature by studying changes in the entire household income distribution, in the context of the federal Empowerment Zone (EZ) program. We do not find evidence that the impoverished residents benefited from the program. Our findings are consistent with the areas becoming more attractive to high-income households. The improvements in the areas were concentrated in those portions of each zone that were relatively better-off prior to EZ designation. The results confirm the prior literature findings that the areas, on average, became more attractive but also suggest that the benefits of the program likely did not accrue to the lower-income residents of the EZ areas.

### **On the spatial economic impact of global warming**

- Journal of Urban Economics---2015---Klaus Desmet, Esteban Rossi-Hansberg

We propose a dynamic spatial theory to analyze the geographic impact of climate change. Agricultural and manufacturing firms locate on a hemisphere. Trade is costly, firms innovate, and technology diffuses over space. Emissions from energy used in production contribute to the atmospheric stock of carbon, which increases temperature. Warming differs across latitudes and its effect on productivity varies across sectors. We

calibrate the model to analyze how climate change affects the spatial distribution of economic activity, trade, migration, growth, and welfare. We assess quantitatively the impact of migration and trade restrictions, energy taxes, and innovation subsidies.

### **The impact of restaurant smoking bans on dining out expenditures: Evidence from panel data**

- Journal of Urban Economics---2015---Dohyung Kim, Barış Yörük

Many state and local governments in the United States have laws that prohibit smoking in restaurants to protect people from the harmful effects of secondhand tobacco smoke. The opponents of these laws have long argued that these laws may harm the restaurant industry by repelling customers who smoke on a regular basis. In this paper, using data from the confidential version of the Panel Study of Income Dynamics (PSID), we estimate the impact of restaurant smoking bans on dining out expenditures of smoking and nonsmoking households. We identify the impact of these bans by exploiting the substantial variation in the implementation of these bans across different cities, counties, and states. Our results indicate that although restaurant smoking bans are associated with a 15.1% decrease in dining out expenditures of smoking households, they increase the dining out expenditures of nonsmoking households by 8.6%. Since the majority of the U.S. population does not smoke, the aggregate impact of restaurant smoking bans on dining out expenditures is slightly positive but statistically insignificant. These results imply that restaurant smoking bans do not harm the restaurant industry.

### **The local impact of typhoons on economic activity in China: A view from outer space**

- Journal of Urban Economics---2015---Robert Elliott, Eric Strobl, Puyang Sun

We examine the impact of typhoons on local economic activity in coastal China. To capture potential damages from an individual typhoon we use historical typhoon track data in conjunction with a detailed wind-field

model. We then combine our damage proxy with satellite derived nightlight intensity data to construct a panel data set that allows us to estimate the impact of typhoons at a spatially highly disaggregated level (approx. 1km). Our results show that typhoons have a negative and significant, but short-term, impact on local activity – a typhoon that is estimated to destroy 50% of the property reduces local economic activity by 20% for that year. Over our period of analysis (1992–2010) total net economic losses are estimated to be in the region of \$US 28.34 billion. To assess the damage risk from future typhoons we use simulated probability distributions of typhoon occurrence and intensity and combine these with our estimated effects. Results suggest that expected annual losses are likely to be around \$US 0.54 billion.

### **Blowing it up and knocking it down: The local and city-wide effects of demolishing high concentration public housing on crime**

- Journal of Urban Economics---2015---Dionissi Aliprantis, Daniel Hartley

This paper estimates the effect that the closure and demolition of roughly 20,000 units of geographically concentrated high-rise public housing had on crime in Chicago. We estimate local effects of closures on crime in the neighborhoods where high-rises stood and in proximate neighborhoods. We also estimate the impact that households displaced from high-rises had on crime in the neighborhoods to which they moved and neighborhoods close to those. Overall, reductions in violent crime in and near the areas where high-rises were demolished greatly outweighed increases in violent crime associated with the arrival of displaced residents in new neighborhoods.

### **When Walmart comes to town: Always low housing prices? Always?**

- Journal of Urban Economics---2015---Devin G. Pope, Jaren Pope

Walmart often faces strong local opposition when trying to build a new store. One common complaint is

that Walmart lowers nearby housing prices. In this study we use over one million housing transactions located near 159 Walmarts that opened between 2000 and 2006 to test if the opening of a Walmart lowers housing prices. Using a difference-in-differences specification, our estimates suggest that a new Walmart store actually increases housing prices by between 2% and 3% for houses located within 0.5 miles of the store and by 1–2% for houses located between 0.5 and 1 mile.

### **Home safety, accessibility, and elderly health: Evidence from falls**

- Journal of Urban Economics---2015---Michael Eriksen, Nadia Greenhalgh-Stanley, Gary V. Engelhardt

This article presents estimates of the impact of home safety and accessibility features on the prevention of serious, non-fatal falls for elderly widowed individuals. As these features are not randomly assigned across homes, we develop an instrumental variable (IV) strategy that relies on the differential decline in the health and functional status of spouses to identify impacts. Specifically, we use the deceased spouse's functional status when alive, as measured by limits to Activities of Daily Living (ADLs), as an IV for the presence of home safety and accessibility features for the surviving spouse in the years after widowhood, and then estimate the effect of these features on the likelihood of a serious fall for the widow using rich longitudinal data from the Health and Retirement Study. The presence of such features reduces the likelihood of a fall requiring medical treatment by 20 percentage points, a substantial effect. However, falls are not the type of health shock that is a main driver of housing tenure transitions among the elderly. Although somewhat speculative, cost-benefit estimates suggest that investments in home safety for the elderly may generate in the short run as much as a dollar-for-dollar reduction in medical expenditures.

### **Spillovers from universities: Evidence from the land-grant program**

- Journal of Urban Economics---2015---Shimeng Liu

This paper estimates the short- and long-run effects of universities on geographic clustering of economic activity, labor market composition and local productivity and presents evidence of local spillovers from universities. I treat the designation of land-grant universities in the 1860s as a natural experiment after controlling for the confounding factors with a combination of synthetic control methods and event-study analyses. Three key results are obtained. First, the designation increased local population density by 6 percent within 10 years and 45 percent in 80 years. Second, the designation did not change the relative size of local manufacturing sector. Third, the designation enhanced local manufacturing output per worker by \$2136 (1840 dollars; 57 percent) in 80 years while the short-run effects were negligible. This positive effect on the productivity in non-education sectors suggests the existence of local spillovers from universities. Over an 80-year horizon, my results indicate that the increase in manufacturing productivity reflects both the impact of direct spillovers from universities and general agglomeration economies that arise from the increase in population.

### **Foreclosure externalities: New evidence**

- Journal of Urban Economics---2015---Kristopher Gerardi, Eric Rosenblatt, Paul S. Willen, Vincent Yao

Policy makers have used externalities to justify government intervention in the foreclosure process. Using a new dataset that covers 15 of the largest metropolitan statistical areas in the U.S. and a novel identification strategy, this paper provides new evidence on the size and source of these externalities. Our results show that a property in distress affects the value of neighboring properties from the time when the borrower becomes seriously delinquent on the mortgage until well after the bank sells the property to a new owner. Properties with seriously delinquent loans within 0.1 miles are found to decrease transaction prices of non-distressed properties by approximately one percent on average. The spillovers are found to dissipate rapidly with distance and completely disappear one year after the bank

sells the property to a new homeowner. Importantly, we find that the size of the externality is sensitive to the condition of foreclosed properties, as bank-owned properties in poor condition lower nearby transaction prices by 2.6% on average while those in good condition marginally raise prices. We argue that the measured price spillovers are physical externalities caused by a lack of property maintenance and not pecuniary externalities that reflect local supply or demand shocks.

### **Public transit bus procurement: The role of energy prices, regulation and federal subsidies**

- Journal of Urban Economics---2015---Shanjun Li, Matthew Kahn, Jerry Nickelsburg

The U.S. public transit system represents a multi-billion dollar industry that provides essential transit services to millions of urban residents. We study the market for new transit buses that features a set of non-profit transit agencies purchasing buses primarily from a few domestic bus makers. In contrast with private passenger vehicles, the fuel economy of public buses has not improved during the last thirty years and is unresponsive to fuel price changes. To understand these findings, we build a model of bus fleet management decisions of public transit agencies that yields testable hypotheses. Our empirical analysis of bus fleet turnover and capital investment highlights the role of energy prices, environmental regulations, and the “Buy America” mandate associated with receiving federal funding to purchase public transit buses.

### **Foreclosure, vacancy and crime**

- Journal of Urban Economics---2015---Lin Cui, Randall Walsh

This paper examines the impact of residential foreclosures and vacancies on violent and property crime. To overcome confounding factors, a difference-in-difference research design is applied to a unique data set containing geocoded foreclosure and crime data from Pittsburgh, Pennsylvania. Results indicate that while foreclosure alone has no effect on crime, violent crime rates

increase by roughly 19% once the foreclosed home becomes vacant – an effect that increases with length of vacancy. We find weak evidence suggesting a potential vacancy effect for property crime that is much lower in magnitude.

### **Homevoters vs. leasevoters: A spatial analysis of airport effects**

- Journal of Urban Economics---2015---Gabriel Ahlfeldt,Wolfgang Maennig

We use a public referendum on a new aviation concept in Berlin, Germany, as a natural experiment to analyze how the interaction of tenure and capitalization effects influences the outcome of direct democracy processes. We distinguish between homevoters, i.e., voters who are homeowners, and leasevoters, i.e., voters who lease their homes. We expect that homevoters would be more likely to support initiatives that positively affect the amenity value of a neighborhood because some of the related benefits of leasevoters are neutralized by adjustments in market rents. Likewise, homevoters would be more likely to oppose initiatives that negatively affect the amenity value of a neighborhood. Our empirical results are consistent with these expectations, implying that public votes on local public goods do not necessarily reflect the spatial distribution of welfare effects in mixed-tenure environments.

### **The impact of Chicago' s small high school initiative**

- Journal of Urban Economics---2015---Lisa Barrow,Diane Whitmore Schanzenbach,Amy Claessens

This project examines the effects of the introduction of new small high schools on student performance in the Chicago Public School (CPS) district. Specifically, we investigate whether students attending small high schools have better graduation/enrollment rates and achievement than similar students who attend regular CPS high schools. We show that students who choose to attend a small school are more disadvantaged on average, including having prior test scores that are about

0.2 standard deviations lower than their elementary school classmates. To address the selection problem, we use an instrumental variables strategy and compare students who live in the same neighborhoods but differ in their residential proximity to a small school. In this approach, one student is more likely to sign up for a small school than another statistically identical student because the small school is located closer to the student' s house and therefore the “cost” of attending the school is lower. The distance-to-small-school variable has strong predictive power to identify who attends a small school. We find that small schools students are substantially more likely to persist in school and eventually graduate. Nonetheless, there is no positive impact on student achievement as measured by test scores.

### **Federalism, taxation, and economic growth**

- Journal of Urban Economics---2015---John William Hatfield

We present a model of endogenous growth where government provides a productive public good financed by income and capital taxes. In equilibrium, a decentralized government chooses tax policy to maximize economic growth, while a centralized government does not do so. Furthermore, these conclusions hold regardless of whether governments are beholden to a median voter or are rent-maximizing Leviathans. However, a decentralized government will under-provide public goods which benefit citizens directly, while a central government beholden to the median voter will optimally invest in such public goods.

### **Regulation of road accident externalities when insurance companies have market power**

- Journal of Urban Economics---2015---Maria Dementyeva,Paul Koster,Erik Verhoef

Accident externalities that individual drivers impose on one another via their presence on the road are among the most important external costs of road transport. We study the regulation of these externalities when insurance companies have market power. Some of the

results we derive have close resemblance to the earlier literature on externality regulation with market power in aviation and private roads, but there are important differences, too. Using analytical models, we compare the first-best public welfare-maximizing outcome with a private profit-maximizing monopoly, and oligopoly. We find that insurance companies will internalize some of the externalities, depending on their degree of market power. We derive optimal insurance premiums, and regular parametric taxes as well as “manipulable” ones that make the companies set socially optimal premiums. The latter take into account that the firm tries to exploit knowledge of the tax rule applied by the government. Finally, we also study the taxation of road users rather than that of firms.

### **Hedonic markets and sorting equilibria: Bid-function envelopes for public services and neighborhood amenities**

- Journal of Urban Economics---2015---John Yinger

Hedonic regressions with house value as the dependent variable are widely used to study public services and neighborhood amenities. This paper builds on the theory of household bidding and sorting across communities to derive bid-function envelopes, which provide a form for these regressions. This approach allows for household heterogeneity and multiple amenities, yields estimates of the price elasticity of amenity demand directly from the hedonic without a Rosen two-step procedure, and provides tests of hypotheses about sorting. An application to Cleveland area data from 2000 yields price elasticities for school quality and neighborhood ethnic composition and supports the sorting hypotheses.

### **Elected or appointed? How the nomination scheme of the city manager influences the effects of government fragmentation**

- Journal of Urban Economics---2015---Sebastian Garmann

Empirical research on the causal effect of government fragmentation derives diverse results. One reason for

this diversity might be that studies are typically settled in a variety of institutional environments. To assess the extent to which the local political system might shape the effects of fragmentation, this study measures the causal effect of a change in the nomination scheme of the city manager on the council size effect. I combine a regression discontinuity design with a difference-in-differences approach in a large panel dataset of German municipalities. The study finds that when the manager is appointed by council, there is no significant council size effect, but that there is a negative effect when the manager is elected by voters for those expenditure categories over which the manager has the most discretion. These findings suggest that the nature of the political system does indeed matter.

### **Real estate collateral value and investment: The case of China**

- Journal of Urban Economics---2015---Jing Wu, Joseph Gyourko, Yongheng Deng

Previous research on the United States and Japan finds economically large impacts of changing real estate collateral value on firm investment that amplified the business cycles of those countries. Working with unique data on land values in 35 major Chinese markets and a panel of firms outside the real estate industry, we estimate investment equations that yield no evidence of a collateral channel effect. Further analysis indicates that China’s debt is not characterized by the frictions that give rise to collateral channel effects elsewhere. Essentially, financially constrained borrowers appear able credibly to commit to repay debt in China. While there is no impact on investment via the collateral channel, our results should not be interpreted as implying there will be no negative fallout from a potential real estate bust on the Chinese economy. There likely would be, but through different channels.

### **House price growth when children are teenagers: A path to higher earnings?**

- Journal of Urban Economics---2015---Daniel Cooper, Maria Luengo-Prado

This paper examines whether rising house prices immediately prior to children entering college have an impact on their earnings as adults. Higher house prices provide homeowners with additional funding to invest in their children's human capital but also raise housing costs. The results show that a 1 percentage point increase in house prices, when children are 17 years old, results in roughly 0.9 percent higher annual income for the children of homeowners, and 1.5 percent lower annual income for the children of renters. House price appreciation at age 17 also leads to higher college enrollment rates at age 19 and an increased likelihood of attendance at higher ranked post-secondary institutions for children of homeowners, as well as lower college enrollment rates for children of renters.

### **Brokers' contractual arrangements in the Manhattan residential rental market**

- Journal of Urban Economics---2015---Heski Bar-Isaac, Alessandro Gavazza

We bring new evidence to bear on the role of intermediaries in frictional matching markets and on how parties design contracts with them. Specifically, we examine two features of contracts between landlords and agents in the Manhattan residential rental market. In our data, 72 percent of listings involve exclusive relationships between landlords and agents (the remaining 28 percent are non-exclusive); and in 21 percent of listings, the landlord commits to pay the agent's fee (in the other 79 percent, the tenant pays the agent's fee). Our analysis highlights that these contractual features reflect landlords' concerns about providing agents with incentives to exert effort specific to their rental units and to screen among heterogeneous tenants.

### **Downtown curbside parking capacity**

- Journal of Urban Economics---2015---Richard Arnott, Eren Inci, John Rowse

Current debates on downtown parking policy have been concentrating on downtown parking pricing, while overlooking downtown parking capacity. This paper focuses on how much curbside to allocate to parking when the

private sector provides garage parking. In the first-best optimum, no cruising for parking occurs, and only curbside parking is provided when demand is low relative to street capacity, both curbside parking and garage parking are provided when demand is intermediate, and only garage parking is provided when demand is high. In the second-best optimum where curbside parking is underpriced, cruising for parking occurs only when both curbside and garage parking are both present. As the fee differential between garage and curbside parking increases, cruising for parking becomes more severe, and the range of demand levels over which curbside and garage parking are both present shrinks and eventually disappears.

### **Organized crime and business subsidies: Where does the money go?**

- Journal of Urban Economics---2015---Guglielmo Barone, Gaia Narciso

Business support policies are widespread in advanced countries, to foster employment and productivity. This paper analyses the role of organized crime in the allocation of public subsidies to businesses. We assemble an innovative data set on the Italian mafia at municipality level and test whether mafia-ridden municipalities receive a disproportionately higher amount of funds. We exploit exogenous variation at municipality level to instrument mafia activity and show that the presence of organized crime positively affects the probability of obtaining funding and the amount of public funds. Organized crime is also found to lead to episodes of corruption in the public administration sector. A series of robustness checks confirms the above findings.

### **The gender gap in non-work travel: The relative roles of income earning potential and land use**

- Journal of Urban Economics---2015---Marlon Boarnet, Hsin-Ping Hsu

We empirically test two hypotheses: (1) that gender differences in income earning potential play a role in the within-household division of non-work travel and (2) that compact land use development can reduce the



within-household gender gap in non-work travel. Using the 2001 Southern California Household Travel Survey, we find that non-work travel patterns for men and women do not vary much by gender unless children are in the household. Households with children display a striking difference in chauffeuring trips and women bear most of the chauffeuring burden. Adjusting for sociodemographics, women in households with children take over 300% more chauffeuring trips than do men living alone. The difference in chauffeuring trips among females and males within the household, the “within-household, female–male chauffeuring gap”, is larger for households with employed males and smaller in households with employed females. The chauffeuring gap is smaller when the woman’s earning power is larger compared to the man in the same household. The chauffeuring gap is larger for households that have higher amounts of single family residential land use in the quarter-mile area around their residence, and the chauffeuring gap is larger for households that live farther than a half mile from the nearest bus stop. The magnitude of the effect of those two land use variables on the chauffeuring gap is similar to the magnitude of variables that measure within-household differences in income-earning potential or female and male employment status, suggesting that more dense land use and better transit service can help reduce disproportionate chauffeuring burdens of women.

### **Air service and urban growth: Evidence from a quasi-natural policy experiment**

- Journal of Urban Economics---2015---Bruce Blonigen, Anca Cristea

While significant work has been done to examine the determinants of regional development, there is little evidence on the role of air services. This paper exploits the large and swift changes to air traffic induced by the 1978 Airline Deregulation Act to identify the link between air traffic and local economic growth. Using data for 263 Metropolitan Statistical Areas (MSAs) over a two-decade time period, we estimate the effects of airline traffic on local population, income, and employment growth. Our most conservative estimates

suggest that a 50-percent increase in an average city’s air traffic growth rate generates an additional stream of income over a 20-year period equal to 7.4 percent of real GDP, the equivalent of \$523.3 million in 1978 dollars.

### **Do we go shopping downtown or in the ‘burbs?**

- Journal of Urban Economics---2015---Philip Ushchev, Igor Sloev, Jacques Thisse

We combine spatial and monopolistic competition to study market interactions between downtown retailers and an outlying shopping mall. Consumers shop at either one marketplace or at both, and buy each variety in volume. The market solution stems from the interplay between the market expansion effect generated by consumers seeking more opportunities, and the competition effect. Firms’ profits increase (decrease) with the entry of local competitors when the former (latter) dominates. Downtown retailers vanish swiftly when the mall is large. A predatory but efficient mall need not be regulated, whereas the regulator must restrict the size of a mall accommodating downtown retailers.

### **Identification in a model of sorting with social externalities and the causes of urban segregation**

- Journal of Urban Economics---2015---Maximilian Kasy

This paper discusses nonparametric identification in a model of sorting in which location choices depend on the location choices of other agents as well as prices and exogenous location characteristics. In this model, demand slopes and hence preferences are not identifiable without further restrictions because of the absence of independent variation of endogenous composition and exogenous location characteristics. Several solutions of this problem are presented and applied to data on neighborhoods in US cities. These solutions use exclusion restrictions, based on either subgroup demand shifters, the spatial structure of externalities, or the dynamics of prices and composition in response to an amenity shock. The empirical results consistently

suggest the presence of strong social externalities, that is a dependence of location choices on neighborhood composition.

### **The Henry George Theorem in a second-best world**

- Journal of Urban Economics---2015---Kristian Behrens,Yoshitsugu Kanemoto,Yasusada Murata

The Henry George Theorem (HGT) states that, in first-best economies, the fiscal surplus of a city government that finances the Pigouvian subsidies for agglomeration externalities and the costs of local public goods by a 100% tax on land is zero at optimal city sizes. We extend the HGT to distorted economies where product differentiation and increasing returns are the sources of agglomeration economies and city governments levy property taxes. Without relying on specific functional forms, we derive a second-best HGT that relates the fiscal surplus to the excess burden expressed as an extended Harberger formula.

### **Suburbanization and highways in Spain when the Romans and the Bourbons still shape its cities**

- Journal of Urban Economics---2015---Miquel-Ángel García-López,Adelheid Holl,Elisabet Viladecans-Marsal

We estimate the effects of highways on the suburbanization of Spanish cities. Based on Spain's historical roads – the almost 2000years old Roman roads and the 1760 Bourbon roads –, we rely on an instrumental variables (IV) strategy because of the endogeneity of highway provision. Our results show that, first, each highway emanating from central cities caused an 8–9% decline in central city population between 1960 and 2011. Second, each highway ray fostered a 20% population growth in the suburbs, in particular in suburban municipalities where ramps were located. Finally, we confirm the increasing role of highways on shaping urban form: each additional kilometer closer to the nearest highway ramp increased municipal density growth by an 8%.

### **Dreams of urbanization: Quantitative case studies on the local impacts of nuclear power facilities using the synthetic control method**

- Journal of Urban Economics---2015---Michihito Ando

This paper uses the synthetic control (SC) method to examine how the establishment of nuclear power facilities (NPFs) in Japan in the 1970s and 1980s has affected local per capita income levels in the municipalities in which they were located (NPF municipalities). Eight quantitative case studies using the SC method clarify that the effects of NPF establishment on per capita taxable income levels are highly heterogeneous. The estimated effects are often economically meaningful and in some cases huge: the income level was 11% higher on average and 62% higher in one municipality in 2002 when compared with counterfactual units. On the other hand a few of the NPF municipalities have received only weak or negligible effects from NPF establishment. The post-estimation comparisons of employment between the NPF municipalities and the SC units suggest that the size of the direct labor demand shocks and subsequent indirect employment effects on nontradable service sectors have contributed to the increase in per capita income levels.

### **A note on public goods in a decentralized fiscal union: Implications of a participation constraint**

- Journal of Urban Economics---2014---Thomas Aronsson,Luca Micheletto,Tomas Sjögren

This paper re-examines the question of whether federal ex-post redistribution in terms of public funds leads to under-provision of public goods when member states may leave the economic federation. We show that federal ex-post redistribution under a binding participation constraint does not necessarily mean under-provision of local and federal public goods.

## **Is agglomeration really good for growth? Global efficiency, interregional equity and uneven growth**

- Journal of Urban Economics---2014---Fabio Cerina, Francesco Mureddu

According to NEG literature, spatial concentration of industrial activities increases growth at the regional and aggregate level without generating regional growth differentials. This view is not supported by the data. We extend the canonical model with an additional sector producing non-tradable goods which benefits from localized knowledge spillovers coming from the R&D performing industrial sector. This view, motivated by the evidence, generates both an anti-growth and a pro-growth effect of agglomeration for both the deindustrializing and the industrializing regions and leads to two novel results: (1) when agglomeration takes place, growth is lower in the periphery; (2) agglomeration may have a negative effect on the growth rate of real income, both at the regional and at the aggregate level. Our conclusions have relevant policy implications: contrary to the standard view, current EU and US regional policies favouring industrial dispersion might be welfare-improving both at the regional and the aggregate level and may reduce regional income disparities.

## **How does home equity affect mobility?**

- Journal of Urban Economics---2014---Fredrik Andersson, Tom Mayock

The impact of the housing crash on household mobility is theoretically ambiguous. Households that have little or negative equity are less likely to move because the proceeds from the sale of the home may not be large enough to pay off the original mortgage and provide a sufficient down payment on a new home. On the other hand, at sufficiently negative levels of home equity, household mobility may actually increase through the foreclosure channel. In this paper we develop and empirically test a model that incorporates both of these mechanisms. Our empirical results – based on data

for Florida homeowners – provide evidence of a non-monotonic relationship between home equity and mobility. Although default-induced mobility did increase following the financial crisis, this increase did little to offset the substantial decline in voluntary moves due to home equity lock-in; we find that on net, household mobility declined by roughly 25% in our sample because of reductions in equity.

## **Provision and price of child care services: For-profits and nonprofits**

- Journal of Urban Economics---2014---Mark Owens, Adam D. Rennhoff

We study the market for child care services, with a special focus on examining competition between for-profit and nonprofits. We estimate a two-stage oligopoly model of product differentiation. The first stage estimates a model of endogenous market structure and the second stage corrects for market structure to examine the prices charged and capacity choices for child care centers. We find that the actions of “same-type” providers have a statistically significant impact on a provider’s entry and pricing decisions but we fail to find evidence that the actions of “other types” have a significant impact. Nonprofit child care providers and Head Start centers do not appear to crowd out for-profit providers. Further, we find that for-profits and nonprofits respond differently to market characteristics generating spatial differences in the types of center available in a market. Our data suggest that for-profits are more likely to enter markets with higher percentages of economically disadvantaged students, but they primarily serve those who work, rather than live, in the market. The prevalence of disadvantaged students does not impact the entry decision of nonprofits leaving disadvantaged areas with relatively fewer non-profit options to serve residents. Policies to encourage for-profit daycare would likely lead centers to locate in markets where they can provide service for workers, whereas a policy to encourage nonprofit entry might be more effective in providing low cost care for nearby residents.

## **Natural disasters, growth and institutions: A tale of two earthquakes**

- Journal of Urban Economics---2014---Guglielmo Barone,Sauro Mocetti

We examine the impact of natural disasters on GDP per capita by applying the synthetic control approach and using a within-country perspective. Our analysis encompasses two large-scale earthquakes that occurred in two different Italian regions in 1976 and 1980. We show that the short-term effects are negligible in both regions, though they become negative if we simulate the GDP that would have been observed in absence of financial aid. In the long-term, our findings indicate a positive effect in one case and a negative effect in the other, largely reflecting divergent patterns of the TFP. Consistent with these findings, we offer further evidence suggesting that a quake and related financial aid might either increase technical efficiency via a disruptive creation mechanism or reduce it by stimulating corruption, distorting the markets and deteriorating social capital. Finally, we show that the bad outcome is more likely to occur in regions with lower pre-quake institutional quality. As a result, our evidence suggests that unanticipated local shocks are likely to change long run growth rates, exacerbating territorial disparities.

## **Self-employment and entrepreneurship in urban and rural labour markets**

- Journal of Urban Economics---2014---Giulia Faggio,Olmo Silva

We study the link between self-employment and some salient aspects of entrepreneurship – namely business creation and innovation – in urban and rural labour markets. In order to do so, we combine individual and firm-level data for Britain aggregated at the Travel-to-Work Area level. We find that a higher incidence of self-employment positively and strongly correlates with business creation and innovation in urban areas, but not in rural areas. We also document that more rural than urban workers become self-employed in areas with comparably poor labour market opportunities,

although this heterogeneity is not evident when focussing on entrepreneurship. Finally, we show that the misalignment between self-employment and our proxies for entrepreneurship in rural areas disappears once we account for local labour market conditions. Our results suggest that self-employment, business creation and innovation are well lined-up in urban areas because they capture the same economic phenomenon – namely, genuine entrepreneurship. This is not the case for rural areas.

## **Selective decentralized leadership**

- Journal of Urban Economics---2014---Emilson Silva

This paper examines the efficiency of decentralized leadership where regional governments contribute to the provision of multiple regional and national public goods. Unlimited decentralized leadership is inefficient because regional governments have incentives to overspend resources in the provision of regional public goods. Selective decentralized leadership is socially efficient if commitments are restricted to regional contributions to national public goods, since in this case regional governments face “correct” incentives when they contribute to national and regional public goods. The model applies to different types of national public goods. Aggregation technologies include the orthodox summation, and nonlinear and asymmetric transformation functions.

## **Peer effects in the demand for housing quality**

- Journal of Urban Economics---2014---Eleonora Patacchini,Giuseppe Venanzoni

Using detailed data on friendship networks within neighborhoods, we investigate the importance of social interactions in one’s own residential neighborhood in the demand for housing quality. We find evidence consistent with the presence of peer effects, especially for households living in urban areas. Our findings are in line with the prediction of a model where conformity preferences underlie economic outcomes that involve interactions with peers.

## **Does state preschool crowd-out private provision? The impact of universal preschool on the childcare sector in Oklahoma and Georgia**

- Journal of Urban Economics---2014---Daphna Bas-sok,Maria Fitzpatrick,Susanna Loeb

Universal preschool policies introduced in Georgia and Oklahoma offer an opportunity to investigate the impact of government intervention on provision of childcare. Since Georgia used a voucher-like program and Oklahoma utilized its existing public schools, the two states offer a case study of how government provision compares to government subsidization alone. Using a synthetic control group difference-in-difference estimation framework, we examine the effects of universal preschool on childcare providers. In both states there is an increase in the number of formal childcare centers. With the voucher-like program in Georgia, the overall increase in care is partly driven by an increase in the supply of formal childcare in the private sector and partly driven by new publicly-provided preschools. However, there is substantial crowd-out of private consumption of preschool. In Oklahoma, where universal preschool is publicly provided, the increase in the number of childcare providers occurred only in the public sector. The expansion of publicly-provided care seems to be driven largely by movement of employees from private centers to public settings. As such, this case-study comparison suggests that government subsidization through funding was more effective at expanding preschool than government provision.

## **Tax avoidance and business location in a state border model**

- Journal of Urban Economics---2014---Shawn Rohlin,Stuart Rosenthal,Amanda Ross

Previous studies have struggled to demonstrate that higher taxes deter business activity. We revisit this issue by estimating the effect of changes over time in cross-border differences in state tax conditions on the tendency for new establishments to favor one side of a state border over the other. Identification is enhanced by taking account of previously overlooked reciprocal

agreements that require workers to pay income tax to their state of residence as opposed to their state of employment. When reciprocal agreements are in force, higher personal income tax rates lure companies from across the border, while corporate income tax and sales tax rates have the opposite effect. Where reciprocal agreements are not in place, the results are largely reversed. These patterns are amplified in heavily developed locations, and differ in anticipated ways by industry and corporate/non-corporate status of the establishment. Overall, results strengthen the view that state-level tax policies do affect the location decisions of entrepreneurs and new business activity, but not in a way that lends itself to a one-size-fits-all summary.

## **Towards a general theory of mixed zones: The role of congestion**

- Journal of Urban Economics---2014---Yuval Kantor,Piet Rietveld,Jos van Ommeren

Mixed commercial and residential land use is observed in most cities around the world. Despite its ubiquity, urban economic theory is rather silent on the formation of mixed land use. In particular, standard bid rent models typically predict complete segregation of land use. The two main exceptions are Fujita and Ogawa (1982) and Lucas and Rossi-Hansberg (2002), who introduce bid rent models that allow for endogenous business and residential location choice as well as employment agglomeration externalities. These models predict zones that are characterized by a restrictive type of mixed land use, where there are as many residents as jobs at every location. We extend the latter model by introducing a traffic congestion external effect that adds a degree of freedom to the shape of the bid rent curves, and allows them to coincide over contiguous locations in the city where commuting takes place. We show that this combination of congestion and agglomeration externalities leads to a general type of mixed land use zones.

## Do art galleries stimulate redevelopment?

- Journal of Urban Economics---2014---Jenny Schuetz

New York City is often held up as a successful example of arts-led economic development. Case studies have documented the influx of avant-garde artists and galleries into several neighborhoods, including Greenwich Village, Soho, and Chelsea, followed by yuppies and boutiques. Some researchers have used these examples to argue that artists and galleries can spur gentrification. An alternative hypothesis is that galleries choose to locate in neighborhoods with high levels of amenities. In this paper, I examine whether concentrations of galleries in Manhattan are associated with redevelopment of surrounding neighborhoods, conditional on initial neighborhood amenities. Results indicate that new galleries locate in high amenity, affluent neighborhoods, and near existing star galleries. In simple bivariate regressions, star gallery density is positively correlated with several metrics of building change. However, these correlations diminish when controls are added for initial neighborhood physical and economic conditions, and weaken still further under an IV approach. Results are consistent with galleries selecting neighborhoods that have a higher propensity to redevelop, due to the presence of observed and unobserved amenities.

## The effects of unemployment protection on migration in lagging regions

- Journal of Urban Economics---2014---Jordi Jofre-Monseny

In this paper we analyze the unintended effects on mobility of a national place-based policy (SIPTEA) increasing unemployment protection in two lagging regions of southern Spain, namely, Extremadura and Andalucía. Using a border identification strategy and (1981 and 1991) census data at the municipal level, we estimate the effects of SIPTEA on population growth, the probability of staying and in-migration in rural areas that are experiencing high unemployment. The results indicate that the policy increased both the probability of staying and in-migration, although the

locational inefficiencies implied are not particularly large.

## Patterns of growth in Chinese cities: Implications of the land lease

- Journal of Urban Economics---2014---Paul Anglin, David Dale-Johnson, Yanmin Gao, Guozhong Zhu

A special feature of China's housing market is land use rights in the form of land leasehold contracts granted by the government. We consider an equilibrium model in which a representative developer may choose to redevelop existing centrally located housing or to develop new housing at the periphery of the city. We show that as the city grows, the land leasehold system results in the city center being developed less intensely and more land being used on the outskirts of the city when compared to a fee simple environment. Thus, cities in China are likely to be relatively more spread out, with city centers relatively older than would be the case with "fee simple" ownership. Our model suggests that excess residential land use is about 6 percent. In addition, compared with the ownership case, housing supply will grow more quickly in the near future, but more slowly later on during the transition of the Chinese economy. Parallel to the supply growth pattern, equilibrium price grows relative slowly in the near future, but more quickly later on. While we focus on residential uses, we believe our model can be applied to other land uses.

## House prices and female labor force participation

- Journal of Urban Economics---2014---William Johnson

Is there a causal connection between house prices and labor force participation of married women? The simple correlation between house prices and married women's labor force participation across U.S. metro areas is positive. Plausible, informal arguments have been advanced to support causation in either direction: prices raising participation (negative income effects of higher house prices lead more married women to

work) or participation raising prices (richer two-earner households bid up the price of scarce housing). I construct an equilibrium model of location, labor supply and real estate (land) prices within a metro area which predicts that (1) metro areas with exogenously less buildable land will have higher house prices and more labor force participation of married women, while (2) metro areas with married women exogenously more prone to work will have higher house prices. Using geographic instruments for housing supply, I find little evidence of a positive effect of house prices on married women's labor force participation, but a somewhat greater possibility that house prices raise their earnings. Likewise, an instrument for married women's labor supply reveals no consistent significant causal effect of two earner households on housing prices, although the possibility of a positive effect cannot be ruled out.

### **Social housing, neighborhood quality and student performance**

- Journal of Urban Economics---2014---Felix Weinhardt

Children who grow up in deprived neighborhoods underperform at school and later in life but whether there is a causal link remains contested. This study estimates the short-term effect of very deprived neighborhoods, characterized by a high density of social housing, on the educational attainment of fourteen years old students in England. To identify the causal impact, this study exploits the timing of moving into these neighborhoods. I argue that the timing can be taken as exogenous because of long waiting lists for social housing in high-demand areas. Using this approach, I find no evidence for negative short-term effects on teenage test scores.

### **Separate when equal? Racial inequality and residential segregation**

- Journal of Urban Economics---2014---Patrick Bayer,Hanming Fang,Robert McMillan

This paper sets out a new mechanism involving the emergence of middle-class black neighborhoods that

can lead segregation in American cities to increase as racial inequality narrows. The formation of such neighborhoods requires a critical mass of highly educated blacks in the population, and leads to an increase in segregation when those communities are attractive for blacks who would otherwise reside in middle-class white neighborhoods. To assess the empirical importance of this "neighborhood formation" mechanism, we propose a two-part research design. First, inequality and segregation should be negatively related in cross section for older blacks if our mechanism operates strongly, as we find using both the 1990 and 2000 Censuses. Second, a negative relationship should also be apparent over time, particularly for older blacks. Here, we show that increased educational attainment of blacks relative to whites in a city between 1990 and 2000 leads to a significant rise in segregation, especially for older blacks, and to a marked increase in the number of middle-class black communities. These findings draw attention to a negative feedback loop between racial inequality and segregation that has implications for the dynamics of both phenomena.

### **Does federal financial aid affect college enrollment? Evidence from drug offenders and the Higher Education Act of 1998**

- Journal of Urban Economics---2014---Michael Lovenheim,Emily Owens

In 2001, amendments to the Higher Education Act made people convicted of drug offenses ineligible for federal financial aid for up to two years after their conviction. Using rich data on educational outcomes and drug charges in the NLSY 1997, we show that this law change had a large negative impact on the college attendance of students with drug convictions. On average, the temporary ban on federal financial aid increased the amount of time between high school graduation and college enrollment by about two years, and we also present suggestive evidence that affected students were less likely to ever enroll in college. Students living in urban areas are the most affected by these amendments. Importantly, we do not find that the law deterred young people from committing drug

felonies nor did it substantively change the probability that high school students with drug convictions graduated from high school. We find no evidence of a change in college enrollment of students convicted of non-drug crimes, or of those charged by not convicted of drug offenses. In contrast to much of the existing research, we conclude that, for this high-risk group of students, eligibility for federal financial aid strongly impacts college investment decisions.

### **Public transport reliability and commuter strategy**

- Journal of Urban Economics---2014---Guillaume Monchambert, André de Palma

We consider the modeling of a bi-modal competitive network involving a public transport mode, which may be unreliable, and an alternative mode. Commuters select a transport mode and their arrival time at the station when they use public transport. The public transport reliability set by the public transport firm at the competitive equilibrium increases with the alternative mode fare, via a demand effect. This is reminiscent of the Mohring Effect. The study of the optimal service quality shows that often, public transport reliability and thereby patronage are lower at equilibrium compared to first-best social optimum. The paper provides some public policy insights.

### **Jackpot? The impact of lottery scholarships on enrollment in Tennessee**

- Journal of Urban Economics---2014---Donald Bruce, Celeste Carruthers

We identify how the cost of college shapes high school graduates' choice of college state and sector by exploiting discontinuous eligibility criteria for broad-based merit scholarships in Tennessee. For students whose ACT is a decisive factor in their scholarship eligibility, reductions in college cost result in substitution away from two-year community colleges in favor of four-year institutions. This pattern is more prominent among lower income students, and treatment effects

are limited to a very local window around the qualifying threshold. We find no evidence that the scholarship affects college-going at the eligibility margin, little to no evidence of substitution between in-state and out-of-state colleges, and no evidence of substitution between public and private universities. Even so, results demonstrate that merit aid encompassing the middle of the ability spectrum can improve the quality of colleges students choose to attend.

### **Housing dynamics: An urban approach**

- Journal of Urban Economics---2014---Edward L. Glaeser, Joseph Gyourko, Eduardo Morales, Charles G. Nathanson

A dynamic linear rational equilibrium model in the tradition of Alonso, Rosen and Roback is consistent with many outstanding stylized facts of housing markets. These include: (a) that the markets are local in nature; (b) that construction persistence is fully compatible with mean reversion in prices; and (c) that price changes are predictable. Calibration exercises to match moments of the real data have notable successes and failures. The volatility in local income processes as reflected in HMDA mortgage applicant data can account for much of the observed price and construction volatility, except for the most inelastically supplied local markets. The model's biggest failure lies in its inability to match the strong persistence in high frequency price changes from year to year.

### **Alas, my home is my castle: On the cost of house ownership as a screening device**

- Journal of Urban Economics---2014---Lutz Arnold, Andreas Bahl

This paper analyzes a model in which housing tenure choice serves as a means of screening households with different utilization rates. If the proportion of low-utilization types is small, there is a separating equilibrium at which tenure choice acts as a screening device: consistent with empirical evidence, low-utilization households buy a house, while high-utilization types rent. Otherwise, there is a pooling equilibrium. The



reason why, contrary to standard screening models, a pooling equilibrium possibly exists is indivisibility of home ownership, which makes it a very costly screening device. Introducing partial ownership restores the standard results: non-existence of a pooling equilibrium and possible non-existence of equilibrium.

### **The fundamental law of highway congestion revisited: Evidence from national expressways in Japan**

- Journal of Urban Economics---2014---Wen-Tai Hsu,Hongliang Zhang

The fundamental law of highway congestion states that when congested, the travel speed on an expanded expressway reverts to its previous level before the capacity expansion. In this paper, we propose a theory that generalizes this statement and finds that if there exists a coverage effect, that is, the effect of longer road length on traffic conditional on capacity, then the new equilibrium travel speed could be lower than its previous level. Given the fundamental law, the theory predicts that the elasticity of traffic to road capacity is at least 1. We estimate this elasticity for national expressways in Japan and test this prediction. Using the planned national expressway extension as an exogenous source of variation for capacity expansion, we obtain elasticity estimates ranging between 1.24 and 1.34, consistent with the prediction of our theory. We further investigate the sources of the larger-than-unity elasticity and find that the coverage effect plays a critical role, compared with the effect due to lane expansion.

### **Alcohol availability and crime: Lessons from liberalized weekend sales restrictions**

- Journal of Urban Economics---2014---Hans Grönqvist,Susan Niknami

We investigate a large-scale experimental scheme implemented in Sweden whereby the state in the year 2000 required all alcohol retail stores in selected areas to stay open on Saturdays. The purpose of the scheme was to evaluate possible social consequences of

expanding access to alcohol during weekends. Using rich individual level data we show that this increase in alcohol availability raised both alcohol use and crime.

### **Simulating confidence for the Ellison–Glaeser index**

- Journal of Urban Economics---2014---Andrew Cassey,Ben Smith

The Ellison and Glaeser (1997) index is an unbiased statistic of industrial localization. Though the expected value of the index is known, ad hoc thresholds are used to interpret the extent of localization. We improve the interpretation of the index by simulating confidence intervals that a practitioner may use for a statistical test. In the data, we find cases whose index value is above the ad hoc threshold that are not statistically significant. We find many cases below the ad hoc threshold that are statistically significant. Our simulation program is freely available and is customizable for specific applications.

### **Commuting for meetings**

- Journal of Urban Economics---2014---Mogens Fosgerau,Leonid Engelson,Joel P. Franklin

Urban congestion causes travel times to exhibit considerable variability, which leads to coordination problems when people have to meet. We analyze a game for the timing of a meeting between two players who must each complete a trip of random duration to reach the meeting, which does not begin until both are present. Players prefer to depart later and also to arrive sooner, provided they do not have to wait for the other player. We find a unique Nash equilibrium, and a continuum of Pareto optima that are strictly better than the Nash equilibrium for both players. Pareto optima may be implemented as Nash equilibria by penalty or compensation schemes.

## **Spillover effects of subprime mortgage originations: The effects of single-family mortgage credit expansion on the multifamily rental market**

- Journal of Urban Economics---2014---Brent Ambrose,Moussa Diop

The dramatic expansion in subprime mortgage credit fueled a remarkable boom and bust in the US housing market and created a global financial crisis. Even though considerable research examines the housing and mortgage markets during the previous decade, how the expansion in mortgage credit affected the rental market remains unclear; and yet, over 30 percent of all U.S. households reside in the rental market. Our study fills this gap by showing how the multifamily rental market was adversely affected by the development of subprime lending in the single-family market before the advent of the 2007/2008 subprime induced financial crisis. We provide evidence for a fundamentals based linkage by which the effect of an innovation in one market (i.e, the growth in subprime mortgage originations) is propagated through to another market. Using a large database of residential rental lease payment records, our results confirm that the expansion in subprime lending corresponds with an overall decline in the quality of rental payments. Finally, we present evidence showing that the financial performance of multifamily rental properties reflected the increase in rental lease defaults.

## **Land use regulations and the value of land and housing: An intra-metropolitan analysis**

- Journal of Urban Economics---2014---Nils Kok,Paavo Monkkonen,John Quigley

Inferences about the determinants of land prices in urban areas are typically based on housing transactions, which combine payments for land and long-lived improvements. In contrast, we investigate directly the determinants of urban land prices within a metropolitan area – the San Francisco Bay Area. Our analysis focuses on the relationship between the regulation of urban development within different jurisdictions and

land prices, while considering other factors that shape the value of land, such as topography and access to jobs. We find that cities that require a greater number of independent reviews to obtain a building permit or a zoning change have higher land prices, *ceteris paribus*. Finally, we relate the variation in land prices to the prices paid for housing in the region and show that local land use regulations are closely linked to the value of houses sold. This is in part because regulations are so pervasive, and also because land values represent such a large fraction of house values in the San Francisco Bay Area.

## **Why are some regions more innovative than others? The role of small firms in the presence of large labs**

- Journal of Urban Economics---2014---Ajay Agrawal,Iain Cockburn,Alberto Galasso,Alexander Oettl

We study the impact of small firms on innovation in regions where large labs are present. Small firms generate demand for specialized services that lower entry costs for others. This effect is particularly relevant in the presence of large firms that spawn spin-outs caused by innovations deemed unrelated to the firm's overall business. We examine MSA-level patent data during the period 1975–2000 and find that innovation output is higher in regions where both a sizable population of small firms and large labs are present. The finding is robust to across-region as well as within-region analysis and the effect is stronger in certain subsamples in a manner that is consistent with our explanation.

## **Efficiency, equilibrium and exclusion when the poor chase the rich**

- Journal of Urban Economics---2014---Sam Bucovetsky,Amihai Glazer

Using a simple adverse selection model, we characterize equilibrium when the rich chase the poor. If communities are established by competitive entrepreneurs, the equilibrium exists, is unique, and is efficient. It involves

either complete separation, or complete pooling. Different income groups may rank these qualitative outcomes differently. We show how restrictions imposed by a central government may alter the nature of equilibrium: such restrictions may be explained as the choice of a low-income majority altering the equilibrium to the pooling outcome which they prefer.

### **Recent immigrants as labor market arbitrageurs: Evidence from the minimum wage**

- Journal of Urban Economics---2014---Brian Cadena

This paper investigates the local labor supply effects of changes to the minimum wage by examining the response of low-skilled immigrants' location decisions. Canonical models emphasize the importance of labor mobility when evaluating the employment effects of the minimum wage; yet few studies address this outcome directly. Low-skilled immigrant populations shift toward labor markets with stagnant minimum wages, and this result is robust to a number of alternative interpretations. This mobility provides behavior-based evidence in favor of a non-trivial negative employment effect of the minimum wage. Further, it reduces the estimated demand elasticity using teens; employment losses among native teens are substantially larger in states that have historically attracted few immigrant residents.

### **Airlines' strategic interactions and airport pricing in a dynamic bottleneck model of congestion**

- Journal of Urban Economics---2014---Hugo E. Silva,Erik Verhoef,Vincent van den Berg

This paper analyzes efficient pricing at a congested airport dominated by a single firm. Unlike much of the previous literature, we combine a dynamic bottleneck model of congestion and a vertical structure model that explicitly considers the role of airlines and passengers. We show that a Stackelberg leader interacting with a competitive fringe partially internalizes congestion, and that there are various toll regimes that

induce the welfare maximizing outcome, widening the set of choices for regulators. In particular, charging the congestion toll that would apply for fully competitive carriers and that ignores any internalization, to both the leader and the fringe, yields the first-best outcome.

### **Are Catholic primary schools more effective than public primary schools?**

- Journal of Urban Economics---2014---Todd Elder,Christopher Jepsen

This paper assesses the causal effects of Catholic primary schooling on student outcomes such as test scores, grade retention, and behavior. Catholic school students have substantially better average outcomes than do public school students throughout the primary years, but we present evidence that selection bias is entirely responsible for these advantages. Estimates based on several empirical strategies, including an approach developed by Altonji et al. (2005a) to use selection on observables to assess the bias arising from selection on unobservables, imply that Catholic schools do not appreciably boost test scores. All of the empirical strategies point to sizeable negative effects of Catholic schooling on mathematics achievement. Similarly, we find very little evidence that Catholic schooling improves behavioral and other non-cognitive outcomes once we account for selection on unobservables.

### **Merit aid and post-college retention in the state**

- Journal of Urban Economics---2014---David Sjoquist,John Winters

One goal of state merit-based financial aid programs is to increase the stock of college-educated labor in the state by retaining college-educated persons in the state after college. However, there has been surprisingly little research on whether state merit aid programs are effective at this goal. This paper investigates the effect of state merit aid programs on the post-college location of 24–30year olds. We use decennial census and American Community Survey microdata to consider post-college retention effects in the 25 states that implemented merit aid programs between 1991 and 2004.

Our preferred specification implies that strong state merit aid programs on average increase the probability that a college attendee lives in his or her birth state during ages 24–30 by 2.76 percentage points. We also estimate the effect for individual states and find meaningful differences across states in the effect of merit aid programs on in-state post-college retention and explore explanations for these differences.

### **Dynamic bottleneck congestion and residential land use in the monocentric city**

- Journal of Urban Economics---2014---Sergejs Gubins,Erik Verhoef

We consider a monocentric city where a traffic bottleneck is located at the entrance of the central business district. The commuters' departure times from home, residential locations, and lot sizes, are all endogenous. We show that elimination of queuing time under optimal road pricing induces individuals to spend more time at home and to have larger houses, causing urban sprawl. This is opposite to the typical results of urban models with static congestion, which predict cities to become denser with road pricing.

### **Financial literacy and mortgage equity withdrawals**

- Journal of Urban Economics---2014---John Duca,Anil Kumar

Mortgage equity withdrawals (MEW) are correlated with covariates consistent with a permanent income framework augmented for credit-constraints. We assess linkages between MEW and financial literacy/education using the Health and Retirement Study (HRS) and Panel Study of Income Dynamics (PSID). We find that the financially literate are 3–5 percentage points less likely to withdraw housing equity via non-home equity loan mortgages using the HRS, while college graduates are 5 percentage points less likely than those without a high school degree in the PSID. Among those withdrawing housing equity in the PSID, college graduates extract significantly less equity and

are less likely to have high levels of housing leverage after doing so.

### **Spatial lag models with nested random effects: An instrumental variable procedure with an application to English house prices**

- Journal of Urban Economics---2014---Badi Baltagi,Bernard Fingleton,Alain Pirotte

This paper sets up a nested random effects spatial autoregressive panel data model to explain annual house price variation for 2000–2007 across 353 local authority districts in England. The estimation problem posed is how to allow for the endogeneity of the spatial lag variable producing the simultaneous spatial spillover of prices across districts together with the nested random effects in a panel data setting. To achieve this, the paper proposes new estimators based on the instrumental variable approaches of Kelejian and Prucha (1998) and Lee (2003) for the cross-sectional spatial autoregressive model. Monte Carlo results show that our estimators perform well relative to alternative approaches and produces estimates based on real data that are consistent with the theoretical house price model underpinning the reduced form.

### **Reconciling theory and empirics on the role of unemployment in mortgage default**

- Journal of Urban Economics---2014---Joseph Gyourko,Joseph Tracy

Empirical models of mortgage default typically find that the influence of unemployment is negligible compared to other well known risk factors such as high borrower leverage or low borrower FICO scores. This is at odds with theory, which assigns a critical role to unemployment in the decision to stop payment on a mortgage. We help reconcile this divergence by employing a novel empirical strategy involving simulated unemployment histories to measure the severity of attenuation bias in loan-level estimations of default risk due to a borrower becoming unemployed. Attenuation bias results because individual data on unemployment

status is unobserved, requiring that a market-wide unemployment rate be used as a proxy. Attenuation is extreme, with our results suggesting that the use of an aggregate unemployment rate in lieu of actual borrower unemployment status results in default risk from a borrower becoming unemployed being underestimated by a factor more than 100. In addition, our analysis indicates that adding the unemployment rate as a proxy for the missing borrower-specific unemployment indicator does not improve the accuracy of the estimated model over the specification without the proxy variable included. Hence, aggregate portfolio-level risk estimates for mortgage guarantors such as FHA also are not improved.

### **The influence of state policy and proximity to medical services on health outcomes**

- Journal of Urban Economics---2014---Jing Li

This paper examines two factors that help to explain geographic variation in health outcomes. The first factor concerns proximity to medical services. The second factor is state-specific health care policy that may impede access to nearby medical services. Four key findings are obtained. First, the effect of local doctors on reducing mortality rates of various diseases in a county attenuates with distance. Second, at approximately the same distance, in-state doctors contribute more to lowering mortality rates in the primary county than do out-of-state doctors. Third, the lesser impact of nearby out-of-state doctors is further reduced when the primary state adopts more stringent policies that restrict entry of out-of-state physicians. Fourth, the impact of nearby doctors is found to be stronger in more urbanized areas. This is consistent with agglomeration economies being effective in contributing, at least in part, to the productivity of treating patients.

### **Competition for migrants in a federation: Tax or transfer competition?**

- Journal of Urban Economics---2014---Marko Koethenbuerger

This paper provides an analysis of competition for

migrants. Competing in taxes (transfers) renders migration flows less (more) elastic with respect to changes in fiscal policy. Jurisdictions with aligned preferences (i.e. jurisdictions that maximize the interest of the same type of households, either mobile or immobile households) prefer to reduce the competitive pressure and compete in taxes. Jurisdictions with distinct preferences, on the other hand, prefer to expose themselves to more competitive pressure and compete in transfers. This paper offers insights into the optimal use and design of transfers and helps interpret existing empirical evidence.

### **The effect of government corruption on the efficiency of US commercial airports**

- Journal of Urban Economics---2014---Jia Yan,Tae Hoon Oum

In this paper, we argue that the cost of providing public goods is affected by local government corruption because bureaucrats have no strong incentives to pursue mandated tasks under a corrupt environment. Commercial airports in the United States are chosen to demonstrate such impacts of corruption. We first develop a theory which predicts the impacts of corruption on productivity and variable input allocation of airports. We then test the predictions by estimating a stochastic variable cost frontier model which incorporates both technical and allocative efficiency of airports. The empirical evidence confirms the theoretical predictions by revealing the following: (1) airports are less productive in more corrupt environments; and (2) airports tend to use more contracting-out to replace in-house labor in more corrupt environments. The findings can be applied to the context of other public goods and have important policy implications for reforming governance structure of public good provision.

### **Airports and urban sectoral employment**

- Journal of Urban Economics---2014---Nicholas Sheard

This paper estimates the effects of airport infrastructure on relative sectoral employment at the

metropolitan-area level, using data from the United States. To address the potential endogeneity in the determination of airport sizes, the 1944 National Airport Plan is used to instrument for the current distribution of airports. Airport size is found to have a positive effect on the employment share of tradable services, controlling for overall local employment, but no measurable effect on manufacturing or most non-tradable sectors. The effect of airport size on overall local employment is practically zero, suggesting that airports lead to specialization but not growth at the metropolitan-area level. The implied elasticity of tradable-service employment with respect to airport size is approximately 0.22. The results are relevant to the evaluation of airport construction or improvement projects that aim to benefit the local economy by making travel to and from the metropolitan area more convenient.

### **Partial fiscal decentralization and demand responsiveness of the local public sector: Theory and evidence from Norway**

- Journal of Urban Economics---2014---Lars-Erik Borge,Jan Brueckner,Jorn Rattso

This paper provides an empirical test of a principal tenet of fiscal federalism: that spending discretion, when granted to localities, allows public-good levels to adjust to suit local demands. The test is based on a simple model of partial fiscal decentralization, under which earmarking of central transfers for particular uses is eliminated, allowing funds to be spent according to local tastes. The greater role of local demand determinants following partial decentralization is confirmed by the paper's empirical results, which show the effects of the 1986 Norwegian reform.

### **The desegregating effect of school tracking**

- Journal of Urban Economics---2014---Gianni De Fraja,Francisco Martínez-Mora

This paper makes the following point: “detracking” schools, that is preventing them from allocating students to classes according to their ability, may lead

to an increase in income residential segregation. It does so in a simple model where households care about the school peer group of their children. If ability and income are positively correlated, tracking implies that some high income households face the choice of either living in the areas where most of the other high income households live and having their child assigned to the low track, or instead living in lower income neighbourhoods where their child would be in the high track. Under mild conditions, tracking leads to an equilibrium with partial income desegregation where perfect income segregation would be the only stable outcome without tracking.

### **Spatial equilibrium with unemployment and wage bargaining: Theory and estimation**

- Journal of Urban Economics---2014---Paul Beaudry,David Green,Benjamin Sand

In this paper, we present a spatial equilibrium model where search frictions hinder the immediate reallocation of workers both within and across local labor markets. Because of the frictions, firms and workers find themselves in bilateral monopoly positions when determining wages. Although workers are not at each instant perfectly mobile across cities, in the baseline model we assume that workers flows are sufficient to equate expected utility across markets. We use the model to explore the joint determination of wages, unemployment, house prices and city size (or migration). A key role of the model is to clarify conditions under which this type of spatial equilibrium setup can be estimated. We then use U.S. data over the period 1970–2007 to explore the fit and quantitative properties of the model. Our main goal is to highlight forces that influence spatial equilibria at 10-year intervals.

### **State incentives for innovation, star scientists and jobs: Evidence from biotech**

- Journal of Urban Economics---2014---Enrico Moretti,Daniel Wilson

We evaluate the effects of state-provided financial incentives for biotech companies, which are part of a

growing trend of place-based policies designed to spur innovation clusters. We estimate that the adoption of subsidies for biotech employers by a state raises the number of star biotech scientists in that state by about 15% over a three year period. A 10% decline in the user cost of capital induced by an increase in R&D tax incentives raises the number of stars by 22%. Most of the gains are due to the relocation of star scientist to adopting states, with limited effect on the productivity of incumbent scientists already in the state. The gains are concentrated among private sector inventors. We uncover little effect of subsidies on academic researchers, consistent with the fact that their incentives are unaffected. Our estimates indicate that the effect on overall employment in the biotech sector is of comparable magnitude to that on star scientists. Consistent with a model where workers are fairly mobile across states, we find limited effects on salaries in the industry. We uncover large effects on employment in the non-traded sector due to a sizable multiplier effect, with the largest impact on employment in construction and retail. Finally, we find mixed evidence of a displacement effect on states that are geographically close, or states that economically close as measured by migration flows.

### **Do labor market networks have an important spatial dimension?**

- Journal of Urban Economics---2014---Judith K. Hellerstein, Mark Kutzbach, David Neumark

We test for evidence of spatial, residence-based labor market networks. Turnover is lower for workers more connected to their neighbors generally and more connected to neighbors of the same race or ethnic group. Both results are consistent with networks producing better job matches, while the latter could also reflect preferences for working with neighbors of the same race or ethnicity. For earnings, we find a robust positive effect of the overall residence-based network measure, whereas we usually find a negative effect of the same-group measure, suggesting that the overall network measure reflects productivity-enhancing positive network effects, while the same-group measure may capture a non-wage amenity.

### **Why do so few women work in New York (and so many in Minneapolis)? Labor supply of married women across US cities**

- Journal of Urban Economics---2014---Dan Black, Natalia Kolesnikova, Lowell J. Taylor

This paper documents a little-noticed feature of US labor markets—very large variation in the labor supply of married women across cities. We focus on cross-city differences in commuting times as a potential explanation for this variation. We start with a model in which commuting times introduce non-convexities into the budget set. Empirical evidence is consistent with the model's predictions: Labor force participation rates of married women are negatively correlated with the metropolitan area commuting time. Also, metropolitan areas with larger increases in average commuting time in 1980–2000 had slower growth in the labor force participation of married women.

### **Family proximity, childcare, and women's labor force attachment**

- Journal of Urban Economics---2014---Janice Compton, Robert Pollak

We show that close geographical proximity to mothers or mothers-in-law has a substantial positive effect on the labor supply of married women with young children. We argue that the mechanism through which proximity increases labor supply is the availability of childcare. We interpret availability broadly enough to include not only regular scheduled childcare during work hours but also an insurance aspect of proximity (e.g., a mother or mother-in-law who can provide irregular or unanticipated childcare). Using two large datasets, the National Survey of Families and Households and the public use files of the U.S. Census, we find that the predicted probability of employment and labor force participation is 4–10 percentage points higher for married women with young children living in close proximity to their mothers or their mothers-in-law compared with those living further away.

## **The effect of public sector employment on local labour markets**

- Journal of Urban Economics---2014---Giulia Faggio, Henry Overman

This paper considers the impact of public sector employment on local labour markets. Using English data at the Local Authority level for 2003–2007 we find that public sector employment has no identifiable effect on total private sector employment. However, public sector employment does affect the sectoral composition of the private sector. Specifically, each additional public sector job creates 0.5 jobs in the non-tradable sector (construction and services) while crowding out 0.4 jobs in the tradable sector (manufacturing). When using data for a longer time period (1999–2007) we find no multiplier effect for non-tradables, stronger crowding out for tradables and, consistent with this, crowding out for total private sector employment.

## **Ethnic unemployment rates and frictional markets**

- Journal of Urban Economics---2014---Laurent Gobillon, Peter Rupert, Etienne Wasmer

The unemployment rate in France is roughly 6 percentage points higher for African immigrants than for natives. In the US the unemployment rate is approximately 9 percentage points higher for blacks than for whites. Commute time data indicates that minorities face longer commute times to work, potentially reflecting more difficult access to jobs. In this paper we investigate the impact of spatial mismatch on the unemployment rate of ethnic groups using the matching model proposed by Rupert and Wasmer (2012). We find that spatial factors explain 1–1.5 percentage points of the unemployment rate gap in both France and the US, amounting to 17–25% of the relative gap in France and about 10–17.5% in the US. Among these factors, differences in commuting distance play the most important role. In France, though, longer commuting distances may be mitigated by higher mobility in the housing market for African workers. Overall, we still conclude that labor market factors remain the

main explanation for the higher unemployment rate of Africans.

## **Spatial changes in labour market inequality**

- Journal of Urban Economics---2014---Joanne Lindley, Stephen Machin

We study spatial changes in labour market inequality for US states and MSAs using Census and American Community Survey data between 1980 and 2010. We report evidence of significant spatial variations in education employment shares and in the college wage premium for US states and MSAs, and show that the pattern of shifts through time has resulted in increased spatial inequality. Because relative supply of college versus high school educated workers has risen faster at the spatial level in places with higher initial supply levels, we also report a strong persistence and increased inequality of spatial relative demand. Bigger relative demand increases are observed in more technologically advanced states that have experienced faster increases in R&D and computer usage, and in states where union decline has been fastest. Finally, we show the increased concentration of more educated workers into particular spatial locations and rising spatial wage inequality are important features of labour market polarization, as they have resulted in faster employment growth in high skill occupations, but also in a higher demand for low wage workers in low skill occupations. Overall, our spatial analysis complements research findings from labour economics on wage inequality trends and from urban economics on agglomeration effects connected to education and technology.

## **Neighborhood quality and labor market outcomes: Evidence from quasi-random neighborhood assignment of immigrants**

- Journal of Urban Economics---2014---Anna Damm

Settlement in a socially deprived neighborhood may hamper individual labor market outcomes because of lack of employed or highly skilled contacts. I investigate this hypothesis by exploiting a unique natural experiment that occurred between 1986 and 1998



when refugee immigrants to Denmark were assigned to municipalities quasi-randomly, which successfully addresses the methodological problem of endogenous neighborhood selection. I show that individuals sort into neighborhoods. Taking account of location sorting, living in a socially deprived neighborhood does not affect labor market outcomes of refugee men. Their labor market outcomes are also not affected by the overall employment rate and the overall average skill level in the neighborhood. However, an increase in the average skill level of non-Western immigrant men living in the neighborhood raises their employment probability, while an increase in the employment rate of co-national men living in the neighborhood raises their real annual earnings. This provides quasi-experimental evidence that residence-based job information networks are ethnically stratified.

### **The effect of voluntary brownfields programs on nearby property values: Evidence from Illinois**

- Journal of Urban Economics---2013---Joshua Linn

Brownfields are properties whose redevelopment is hampered by known or suspected contamination and by concerns about associated liability. Because failing to redevelop brownfields may negatively affect welfare and the environment, a number of states have created voluntary programs to reduce liability risks and encourage redevelopment of brownfields. For clean or remediated properties, the state certifies that owners of such sites are not subject to federal or state liability under certain conditions. Certification could increase nearby property values because of decreased contamination risk and amenities associated with redeveloping the brownfield. This paper focuses on the Site Remediation Program in Illinois, and estimates the effect of brownfields certification on nearby property values. Employing several strategies to account for unobserved and time-varying variables that may be correlated with certification, I find that the entry and certification of a brownfield 0.25 miles away raises the value of a property by about 1% compared to an otherwise identical property.

### **Uneven landscapes and city size distributions**

- Journal of Urban Economics---2013---Sanghoon Lee, Qiang Li

This paper proposes a new model generating city size distributions that asymptotically follow the log-normal distribution. The log-normal distribution is consistent with Zipf's law in the top tail, which is known to hold for many countries in different periods. The key feature of our model is that it can express city size as a product of multiple random factors (e.g., climate, geographic features, and industry composition). Each factor alone need not generate Zipf's law. Our model provides a justification for classical urban economics models that have been criticized for not delivering Zipf's law, since a single model typically represents only one factor among many present in reality.

### **Why do U.S. states adopt public-private partnership enabling legislation?**

- Journal of Urban Economics---2013---R. Richard Geddes, Benjamin L. Wagner

Public-private partnerships, or PPPs, have the potential to address a range of urban economic issues. As of late 2012, thirty-two U.S. states and Puerto Rico had enacted legislation enabling the use of PPPs. PPP enabling laws address such issues as the treatment of unsolicited PPP proposals, prior legislative approval of PPP contracts, and the mixing of public and private funds. We utilize 13 key elements of PPP enabling laws to develop an index reflecting the degree to which a state's law is encouraging or discouraging of private infrastructure investment. We examine why states pass such laws, and why some states pass legislation that is relatively more favorable to private investment. We consider demand side, supply side, and political/institutional drivers of passage. Vehicle registration growth and greater traffic congestion both increase the likelihood of passage, as does political agreement between a state's executive and legislative branches. Traffic congestion, growth in per-capita income, and the percent of Republicans in the state's

House of Representatives all increase a law's favorability to private investment. There is little indication that traditional public finance variables, such as federal highway aid, affect the likelihood of passage or the favorability of a state's PPP enabling law.

### **Do political parties matter for local land use policies?**

- Journal of Urban Economics---2013---Albert Solé-Ollé, Elisabet Viladecans-Marsal

Despite interest in the impact of land use regulations on housing construction and housing prices, little is known about the drivers of these policies. Conventional wisdom holds that homeowners have an influence on restrictive local zoning. In this paper, we contend that the party controlling local government might make a major difference. We draw on data from a large sample of Spanish cities for the 2003–2007 political term and employ a regression discontinuity design to document that cities controlled by left-wing parties convert much less land from rural to urban uses than is the case in similar cities controlled by the right. The differences between governments on the two sides of the political spectrum are more pronounced in places with greater population heterogeneity and in those facing higher housing demand. We also present evidence suggesting that these partisan differences might ultimately impact on housing construction and housing price growth.

### **School calendars, child care availability and maternal employment**

- Journal of Urban Economics---2013---Jennifer Graves

A year-round calendar redistributes schools days around the year. This paper studies how this redistribution of school days, and therefore child care days available through school, affects maternal employment. The presence of year-round calendars in a district could be correlated with other district level attributes that might affect female employment rates. I therefore use a differencing method that compares the influence of district year-round enrollment on the employment rates

of women with school-aged children relative to women whose eldest child is pre-school-aged. Unobserved district factors should affect employment rates of women with school-aged and pre-school-aged children similarly, yet only women with school-aged children should be directly impacted by school calendar. I find that redistributing child care days available through school into shorter intervals over time negatively impacts maternal employment. Among those women with school-aged children, those also having pre-school-aged children have the hardest time adjusting to differences in existing availability.

### **A silver lining to white flight? White suburbanization and African-American homeownership, 1940–1980**

- Journal of Urban Economics---2013---Leah Boustan, Robert Margo

Between 1940 and 1980, the homeownership rate among metropolitan African-American households increased by 27 percentage points. Nearly three-quarters of this increase occurred in central cities. We show that rising black homeownership in central cities was facilitated by the movement of white households to the suburban ring, which reduced the price of urban housing units conducive to owner-occupancy. Our OLS and IV estimates imply that 26 percent of the national increase in black homeownership over the period is explained by white suburbanization.

### **High-speed Internet growth and the demand for locally accessible information content**

- Journal of Urban Economics---2013---Anton Bekkerman, Gregory Gilpin

Proximity to information resources has repeatedly been shown to affect urban development. However, individuals' increased abilities to access information content electronically may have dampened urban areas' comparative advantage of proximity-driven knowledge flows. We investigate the effects of increased high-speed Internet access on the role of information proximity by modeling changes in the demands for locally-

based information resources, exploiting variation in the use of US public libraries—the most common low-cost providers of locally accessible information content. Data describing a nearly comprehensive set of US public libraries during 2000–2008 provide empirical evidence of complementary growth in Internet access and the use of public library resources, suggesting that Internet access increases the value of locally accessible information content and overall information demand. Moreover, the complementarity is found to be largest in metropolitan areas, indicating that improved Internet access in locations with greatest proximity and information spillover effects are likely to experience more substantial economic impacts.

### **Supply constraints and housing market dynamics**

- Journal of Urban Economics---2013---Andrew Paciorek

Although the volatility of house prices is often ascribed to demand-side factors, constraints on housing supply have important and little-studied implications for housing dynamics. I illustrate the strong relationship between the volatility of house prices and the regulation of new housing supply. I then employ a dynamic structural model of housing investment to investigate the mechanisms underlying this relationship. I find that supply constraints increase volatility through two channels: First, regulation lowers the elasticity of new housing supply by increasing lags in the permit process and adding to the cost of supplying new houses on the margin. Second, geographic limitations on the area available for building houses, such as steep slopes and water bodies, lead to less investment on average relative to the size of the existing housing stock, leaving less scope for the supply response to attenuate the effects of a demand shock. My estimates and simulations confirm that regulation and geographic constraints play critical and complementary roles in decreasing the responsiveness of investment to demand shocks, which in turn amplifies house price volatility.

### **Do small schools improve performance in large, urban districts? Causal evidence from New York City**

- Journal of Urban Economics---2013---Amy Schwartz,Leanna Stiefel,Matthew Wiswall

We evaluate the effectiveness of small high school reform in the country's largest school district, New York City. Using a rich administrative dataset for multiple cohorts of students and distance between student residence and school to instrument for endogenous school selection, we find substantial heterogeneity in school effects: newly created small schools have positive effects on graduation and some other education outcomes while older small schools do not. Importantly, we show that ignoring this source of treatment effect heterogeneity by assuming a common small school effect yields a misleading zero effect of small school attendance.

### **Carpooling and driver responses to fuel price changes: Evidence from traffic flows in Los Angeles**

- Journal of Urban Economics---2013---Antonio Bento,Jonathan Hughes,Daniel Kaffine

We examine carpooling and driver responses to fuel price changes. Using a simple theoretical model, we show that traffic flows in mainline lanes unambiguously decrease when fuel prices increase, and this effect is stronger when the presence of a carpool lane provides a substitute to driving alone. In contrast, in carpool (HOV) lanes flow can either increase or decrease. These predictions are tested using 8 years of traffic flow data for 1700 locations in Los Angeles. In our preferred specification, the mean elasticity of flow with respect to fuel price is 0.136 for HOV lanes. For a 10% increase in fuel price this implies 10 additional carpools per hour, \$8.8 million per year in additional congestion costs for carpoolers and \$11.3 million lower costs for mainline drivers. For mainline lanes, flow elasticities are 0.083 and 0.050 for highways with and without an HOV lane. These estimates imply that the mean highway with an HOV lane experiences a 30% larger decrease in hourly flow compared to the mean highway

without an HOV lane. Flows in HOV lanes show an immediate decrease following a price increase but respond positively to price increases over time, which suggests time is an important input to carpool formation.

### **Measuring the external benefits of homeownership**

- Journal of Urban Economics---2013---N. Edward Coulson,Herman Li

The subsidization of homeownership is justified on efficiency grounds only to the extent that it provides benefits to people other than the homeowner. We use the clustered neighborhoods subsample in the American Housing Survey to measure that benefit in the form of higher housing prices in neighborhoods with higher ownership rates (and lower vacancies). We attempt to account for unobservable neighborhood and house attributes that may be correlated with occupancy and ownership through instrumental variables, switching regressions and panel methods. Estimates indicate that a housing transition from renting to owning creates approximately \$1300 in measured benefits.

### **City size, network structure and traffic congestion**

- Journal of Urban Economics---2013---Theodore Tsekeris,Nikolas Geroliminis

This paper presents an alternative approach for analyzing the relationship between land use and traffic congestion by employing the Macroscopic Fundamental Diagram (MFD). The MFD is an empirically observed relationship between traffic flow and traffic density at the level of an urban region, including hypercongestion, where flow decreases as density increases. This approach is consistent with the physics of traffic and allows the parsimonious modeling of intra-day traffic dynamics and their connection with city size, land use and network characteristics. The MFD can accurately measure the inefficiency of land and network resource allocation due to hypercongestion, in contrast with existing models of congestion. The findings reinforce the

‘compact city’ hypothesis, by favoring a larger mixed-use core area with greater zone width, block density and number of lanes, compared to the peripheral area. They also suggest a new set of policies, including the optimization of perimeter controls and the fraction of land for transport, which constitute robust second-best optimal strategies that can further reduce congestion externalities.

### **The bargaining power of teachers’ unions and the allocation of school resources**

- Journal of Urban Economics---2013---Eric Brunner,Tim Squires

This paper examines how district size affects the bargaining power of teachers’ unions and the allocation of school resources. Our identification strategy exploits the fact that 33 states mandate collective bargaining while 5 states prohibited it. In states that mandate collective bargaining, we find that beginning salaries and the premium paid to experienced teachers increase with district size while the teacher–pupil ratio declines with district size. In contrast, in states that prohibit collective bargaining we find a negative relationship between district size and the premium paid to experienced teachers. District size also has a stronger positive effect on beginning salaries and a weaker negative effect on teacher–pupil ratios in states that prohibit collective bargaining. Collectively, our results suggest that more powerful unions bargain for more generous returns to teacher seniority at the expense of staffing ratios and base salaries.

### **Agglomeration in a city with choosy consumers under imperfect information**

- Journal of Urban Economics---2013---Takaaki Takahashi

The purpose of this paper is to show that taste heterogeneity and imperfect information on the characteristics of available varieties among consumers can lead to the agglomeration of commercial activities. Here, the source of agglomeration is matching. By constructing

a two-region model, we show that two distribution patterns – segregation and full agglomeration – may be supported as equilibrium outcomes. Their properties closely resemble those of the equilibrium patterns in the standard new economic geography models. In addition, it is shown that the third type of equilibrium pattern – incomplete agglomeration – may emerge when consumers pay different amounts of transport cost.

### **Road investments and inventory reduction: Firm level evidence from China**

- Journal of Urban Economics---2013---Han Li,Zhigang Li

This study presents new evidence on the causal impact of transport infrastructure on the economy. In China, inventory has declined over recent decades, while the country's road infrastructure has expanded rapidly. Building on the existing literature, we introduce new approaches, including a quasi-experiment based on differential demand for distant suppliers, to identify the causal relationship between road investments and inventory decline. Examining a large panel data set of Chinese manufacturers from 1998 to 2007, we find one dollar of road spending saves around two cents of inventory costs. This effect is non-trivial but less than that in the United States in the 1970s. Moreover, our estimates also suggest spillover effect from road investments to firms in neighboring provinces.

### **Traffic externalities in cities: The economics of speed bumps, low emission zones and city bypasses**

- Journal of Urban Economics---2013---Bruno De Borger,Stef Proost

This paper considers various policy measures that governments can use to reduce traffic externalities in cities. Unlike much of the available literature that emphasized congestion, we focus on measures that reduce pollution, noise and some accident risks. These measures include noise barriers, speed bumps, traffic lights, tolls, emission standards, low emission zones, and bypass capacity to guide traffic around the city center. Using

a simple model that distinguishes local and through traffic, we study the optimal use of these instruments by an urban government that cares for the welfare of its residents, and we compare the results with those preferred by a federal authority that also takes into account the welfare of road users from outside the city. Our results include the following. First, compared to the federal social optimum, we show that the city government will over-invest in externality-reducing infrastructure whenever this infrastructure increases the generalized cost of through traffic. We can therefore expect an excessive number of speed bumps and traffic lights, but the right investment in noise barriers. Second, when implementing low emission zones, the urban government will set both the fee for non-compliance and the emission standard at a more stringent level than the federal government. Moreover, at sufficiently high levels of through traffic the urban government will prefer imposing a toll instead of implementing a low emission zone. Third, whatever the tolling instruments in place, the city will always underinvest in bypass capacity. Finally, if it can toll all roads but is forced to invest all bypass toll revenue in the bypass, it will never invest in bypass capacity. Although the paper focuses on non-congestion externalities, most insights also hold in the presence of congestion.

### **Local public goods and the demand for high-income municipalities**

- Journal of Urban Economics---2013---Leah Boustan

Affluent towns often deliver high-quality public services to their residents. I estimate the willingness to pay to live in a high-income suburb, above and beyond the demand of wealthy neighbors, by measuring changes in housing prices across city-suburban borders as the income disparity between the two municipalities changes over time. I find that a \$10,000 increase in town-level median income is associated with a seven percent increase in housing values at the border. The estimated demand for high-income municipalities is primarily driven by school quality and lower property tax rates.

## **Second-best cost–benefit analysis in monopolistic competition models of urban agglomeration**

- Journal of Urban Economics---2013---Yoshitsugu Kanemoto

This paper examines the agglomeration benefits of a transportation improvement in a city by modeling the microstructure of urban agglomeration based on monopolistic competition of differentiated intermediate products. Properly extended to include variety distortion in addition to price distortion, Harberger's measure of excess burden yields the agglomeration benefits. The agglomeration benefits are positive if increasing the variety is procompetitive; however, in the anticompetitive case, we cannot exclude the possibility of negative additional benefits. If there are multiple cities, the net agglomeration benefits can be negative when other cities that experience a reduction in population have larger agglomeration economies.

## **What happens to household formation in a recession?**

- Journal of Urban Economics---2013---Kwan Ok Lee, Gary Painter

While many studies have investigated the determinants of housing demand, very few studies have focused on how economic conditions affect the formation of potential households directly. Potential households may choose to delay entry into the housing market by remaining with one's parents during times of economic hardship or by combining with other persons to share housing costs. Using a variety of modeling approaches, we find that both the increase in the unemployment rate and the presence of recessions reduce the rate of household formation. Simulations suggest that these declines are substantively important. For example, in a recession, the likelihood that a young adult will form an independent household falls by 1–9% points depending on the age of the person. By way of comparison, if an individual is unemployed, the likelihood of leaving the parental home is up to 11% points lower.

## **A bathtub model of downtown traffic congestion**

- Journal of Urban Economics---2013---Richard Arnott

In standard economic models of traffic congestion, traffic flow does not fall under heavily congested conditions. But this is counter to experience, especially in the downtown areas of major cities during rush hour. This paper analyzes a bathtub model of downtown rush-hour traffic congestion that builds on ideas put forward by William Vickrey. Water flowing into the bathtub corresponds to cars entering the traffic stream, water flowing out of the bathtub to cars exiting from it, and the height of water in the bathtub to traffic density. Velocity is negatively related to density, and outflow is proportional to the product of density and velocity. Above a critical density, outflow falls as density increases (traffic jam situations). When demand is high relative to capacity, applying an optimal time-varying toll generates benefits that may be considerably larger than those obtained from standard models and that exceed the toll revenue collected.

## **Hypercongestion in downtown metropolis**

- Journal of Urban Economics---2013---Mogens Fosgerau, Kenneth Small

Engineering studies demonstrate that traffic in dense downtown areas obeys a stable functional relationship between average speed and density, including a region of 'hypercongestion', where flow decreases with density. This situation can be described as queuing behind a bottleneck whose capacity declines when the queue is large. We combine such a variable-capacity bottleneck with Vickrey scheduling preferences for the special case, where there are only two possible levels of capacity. Solving the model leads to several new insights, including that the marginal cost of adding a traveler is especially sensitive to the lowest level of capacity reached. We analyze an optimal toll, a coarse toll, and metering, showing substantial benefits from using these policies to eliminate the period of reduced capacity. Under hypercongestion, all of these policies

can be designed so that travelers gain even without considering any toll revenues.

### **Wal-Mart and the geography of grocery retailing**

- Journal of Urban Economics---2013---Paul B. Ellickson,Paul L.E. Grieco

This paper empirically examines the impact of entry by Wal-Mart on competition in the supermarket industry. Using a detailed panel dataset spanning 1994–2006, we estimate the impact of Wal-Mart on firm outcomes and market structure, controlling for persistent local trends and systematic differences across markets by exploiting the detailed spatial structure of our store-level census. We find that Wal-Mart’s impact is highly localized, affecting firms only within a tight, two-mile radius of its location. Within this radius, the bulk of the impact falls on declining firms and mostly on the intensive margin. Entry of new firms is essentially unaffected. Moreover, the stores most damaged by Wal-Mart’s entry are the outlets of larger chains. This suggests that Wal-Mart’s expansion into groceries is quite distinct from its earlier experience in the discount industry, where the primary casualties were small chains and sole proprietorships that were forced to exit the market. This contrast sheds light on the role density economies play in shaping both equilibrium market structure and economic geography. In the case of grocery competition, high travel costs and the perishable nature of groceries appear to impart horizontal differentiation between firms. This differentiation in demand appears to reduce impact of scale economies advantages that Wal-Mart exploited to the detriment of far-flung competitors in the discount store industry.

### **Valuing school quality using boundary discontinuities**

- Journal of Urban Economics---2013---Stephen Gibbons,Stephen Machin,Olmo Silva

Existing research shows that house prices respond to local school quality as measured by average test scores. However, higher test scores could signal higher academic value-added or higher ability, more sought-after

intakes. In our research, we show that both school value-added and student prior achievement – linked to the background of children in schools – affect households’ demand for education. In order to identify these effects, we improve the boundary discontinuity regression methodology by matching identical properties across admissions authority boundaries; by allowing for boundary effects and spatial trends; by re-weighting our data towards transactions that are closest to district boundaries; by eliminating boundaries that coincide with major geographical features; and by submitting our estimates to a number of novel falsification tests. Our results survive this battery of tests and show that a one-standard deviation change in either school average value-added or prior achievement raises prices by around 3%.

### **On the origins of land use regulations: Theory and evidence from US metro areas**

- Journal of Urban Economics---2013---Christian Hilber,Frederic Robert-Nicoud

We model residential land use constraints as the outcome of a political economy game between owners of developed and owners of undeveloped land. Land use constraints benefit the former group via increasing property prices but hurt the latter via increasing development costs. In this setting, more desirable locations are more developed and, as a consequence of political economy forces, more regulated. These predictions are consistent with the patterns we uncover at the US metropolitan area level.

### **Agglomeration elasticities and firm heterogeneity**

- Journal of Urban Economics---2013---David Maré,Daniel Graham

This paper examines three key issues encountered when estimating the relationship between agglomeration and multi factor productivity ( ‘agglomeration elasticities’ ): the sorting of heterogeneous firms, the convexity of agglomeration effects, and the challenges of identifying the impact of persistent spatial differences in effective density. We use a firm-level panel containing

production data together with detailed information on the geographic location of employment, covering a high proportion of the New Zealand economy. We are able to control for heterogeneity along firm, region, and industry dimensions, and to estimate separate agglomeration elasticities across industries and regions. Sorting leads to upward biased elasticity estimates but using firm fixed effects can lead to downward bias due to the highly persistent nature of agglomeration variables. Our preferred estimates control for sorting across regions and industries. Overall, we find a positive agglomeration elasticity of 0.066. Within industries and, to a lesser extent within regions, there is pronounced variation in the strength of agglomeration effects, and evidence of decreasing returns to agglomeration. High density areas attract firms that benefit most from agglomeration.

### **State and local tax competition in a spatial model with sales taxes and residential property taxes**

- Journal of Urban Economics---2013---Ralph M. Braid

This paper presents a theoretical model with a uniformly populated line that is divided into local jurisdictions (and/or states). If one level of government imposes sales and residential property taxes, and if the spatial extent of each taxing jurisdiction is positive and finite, then (in Nash equilibrium) the sales tax rate is less than residential property tax rate, housing consumption is suboptimal, and the public good is underprovided in each jurisdiction. If a very large state (or country) is divided into local jurisdictions, and if both levels of government choose tax rates endogenously, then under some assumptions there is an efficient outcome.

### **Entrepreneurial land developers: Joint production, local externalities, and mixed housing developments**

- Journal of Urban Economics---2013---Hideo Konishi

Housing developments (condos and suburban developments) are not necessarily homogeneous. Developers provide different types of units of various sizes and other characteristics catering to different types of customers. In this paper, we allow joint production and local consumption externalities within each development, and show that land developers who seek a profit-maximizing set of units in developments may provide mixed developments. We show that there exists an equilibrium, and that every equilibrium is Pareto efficient. We provide examples in which mixed developments arise in a long-run equilibrium. We relate this work to a widely used hedonic pricing model by Rosen (1974), and to an equilibrium concept under asymmetric information by Rothschild and Stiglitz (1976).

### **Who offers tax-based business development incentives?**

- Journal of Urban Economics---2013---Alison Felix, James Hines

Many American communities seek to attract or retain businesses with tax abatements, tax credits, or tax increment financing of infrastructure projects (TIFs). The evidence for 1999 indicates that communities are most likely to offer one or more of these business development incentives if their residents have low incomes, if they are located close to state borders, and if their states have troubled political cultures. Ten percent greater median household income is associated with a 3.2% lower probability of offering incentives; 10% greater distance from a state border is associated with a 1.0% lower probability of offering incentives; and a 10% higher rate at which government officials are convicted of federal corruption crimes is associated with a 1.2% greater probability of offering business incentives. TIFs are the preferred incentive of communities whose residents have household incomes between \$25,000 and \$75,000; whereas TIFs are much less commonly offered by communities whose residents have household incomes below \$25,000. The need to finance TIFs out of incremental tax revenues may make it infeasible for many of the poorest of communities to use TIFs for



local business development.

### **Do governments tax agglomeration rents?**

- Journal of Urban Economics---2013---Hyun-Ju Koh,Nadine Riedel,Tobias Böhm

Empirical evidence suggests that firms receive rents from locating in economic agglomerations and industry clusters. Using the German local business tax as a testing ground, we empirically investigate whether these agglomeration rents are taxable for local governments. The analysis exploits a rich data source on the population of German plants to construct measures for the communities' agglomeration characteristics. The findings indicate that economic agglomerations and industry clusters exert a positive impact on the jurisdictional tax rate choice. Further analysis moreover suggests that a municipality's potential to tax agglomeration rents depends on its firm and industry agglomeration relative to neighboring communities. To account for potential endogeneity problems, our analysis exploits long-lagged population and infrastructure variables as instruments for the agglomeration measures.

### **Agglomeration and demographic change**

- Journal of Urban Economics---2013---Theresa Grafeneder-Weissteiner,Klaus Prettnner

This article investigates common consequences of demographic change and economic integration for the spatial location of economic activity. In doing so, it provides a unified framework that introduces an overlapping generation structure into a New Economic Geography model. Whether integration leads to agglomeration crucially hinges on the demographic properties of economies. While population aging strengthens concentration tendencies, population growth acts as a dispersion force. This is consistent with the stylized relationships between demography and urbanization found in the data and thus allows us to assess the possibility of agglomeration in various demographic scenarios.

### **Market structure, countervailing power and price discrimination: The case of airports**

- Journal of Urban Economics---2013---Jonathan Haskel,Alberto Iozzi,Tommaso Valletti

A number of interesting policy questions have arisen regarding airport landing fees. For example, what is the impact of joint ownership of airports? Does airline countervailing power stop airports raising fees? Should airports be prohibited, as an EU directive intends, from charging differential input prices to airlines? We set out a model of upstream airports and downstream airlines with varying countervailing power and pricing structures. Our major findings are: (a) an increase in upstream concentration or in the degree of differentiation between airports always increases the landing fee; (b) the effect of countervailing power, via an increase in downstream concentration, lowers landing fees, but typically does not pass through to consumers; (c) with Cournot competition, uniform landing fees are always higher than discriminatory fees.

### **Language and urban labor market segmentation: Theory and evidence**

- Journal of Urban Economics---2013---Qiang Li

I propose a language theory of labor market segmentation. People of different language origins form separate urban labor submarkets and can switch between submarkets. Two types of wage differentials emerge, namely the Within-Labor-Market Wage Gap and the Within-Language-Group Wage Gap. The average wage in each market and a worker's choice of the labor market depend on the population sizes of the relevant groups. These implications are tested using the 2001 Census of Canada Public Use Microdata. A unique feature of these data is the reported work language, which helps me to identify labor market segments. The empirical evidence supports my theory.

### **Home market effects with endogenous costs of production**

- Journal of Urban Economics---2013---Armando Garcia Pires

In a standard imperfect competition model, we endogenize the costs of production of firms in the increasing returns sector (IRS) via process R&D. We show that firms in the larger region in terms of demand invest more in R&D (i.e.: they are bigger in size and have lower marginal costs) than firms in the smaller region, since the former exploit larger economies of scale in production to pay for the costs of R&D. As a result, when the return on R&D is high, the larger region does not employ disproportionately more labor nor attracts a disproportionately larger share of firms in the IRS in relation to share of demand it hosts, i.e.: negative home market effects (HMEs) in employment and in the number of firms. When this occurs, only partial agglomeration of the IRS in the larger region is sustainable in equilibrium. Even so, the larger region always runs trade surplus in the IRS, i.e.: HME in trade patterns.

### **Do foreclosures cause crime?**

- Journal of Urban Economics---2013---Ingrid Gould Ellen,Johanna Lacoe,Claudia Ayanna Sharygin

The mortgage foreclosure crisis has generated increasing concerns about the effects of foreclosed properties on their surrounding neighborhoods, and on criminal activity in particular. There are a number of potential ways in which a foreclosed property might increase the payoffs to committing crime and decrease the likelihood of being caught, including reduced maintenance, residential turnover, and vacancy. Using point-specific, longitudinal crime, foreclosure, and other property data from New York City, this paper determines whether foreclosed properties affect criminal activity on the surrounding blockface – an individual street segment including properties on both sides of the street. We find that additional foreclosures on a blockface lead to additional total crimes, violent crimes and public order crimes. These effects appear to be largest when foreclosure activity is measured by the number of foreclosed properties that are on their way to an auction or have reverted to bank ownership. We find that effects are largest in neighborhoods with moderate or high levels of crime, and on blockfaces with concentrated

foreclosure activity.

### **Option value and the price of teardown properties**

- Journal of Urban Economics---2013---Daniel McMillen,O’ Sullivan, Arthur

The introduction of uncertainty over the future price of structural capital into a model of teardowns implies a value to delaying the demolition vs. preservation decision, and that the market price of a redeveloped property may increase with its quantity of structural capital. Using data from an active teardown market, we test the model’s prediction that hedonic price function coefficients depend on the expected time between sale and demolition. As predicted, structural variables have significant effects on the sales prices of both teardown and non-teardown properties, and the effects are generally much larger the lower the estimated teardown probability.

### **Segregation and Tiebout sorting: The link between place-based investments and neighborhood tipping**

- Journal of Urban Economics---2013---Spencer Banzhaf,Randall Walsh

Segregation has been a recurring social concern throughout human history. While much progress has been made to our understanding of the mechanisms driving segregation, work to date has ignored the role played by location-specific amenities. Nonetheless, policy remedies for reducing group inequity often involve place-based investments in minority communities. In this paper, we introduce an exogenous location-specific public good into a model of group segregation. We characterize the equilibria of the model and derive the comparative statics of improvements to the local public goods. We show that the dynamics of neighborhood tipping depend on the levels of public goods. We also show that investments in low-public good communities can actually increase segregation.

## Urban density, law and the duration of real estate leases

- Journal of Urban Economics---2013---Sheridan Titman,Garry Twite

This study explores the relationship between a country's legal system and how its cities develop by examining the considerable variations in commercial real estate lease duration (or term) across both countries and cities. We find that the cross-country variation in lease duration and building construction is related to the content (common versus civil law) and efficiency (integrity and enforceability) of the legal system in the respective countries. First, we find that countries with a common law system and lower levels of corruption tend to have longer leases. Second, we find that in the United States, high-rise Class A office buildings tend to have tenants with longer term leases, suggesting that the advantages associated with being able to write and enforce a long term lease is particularly important for the development of high-rise office buildings. Finally, we find that there are in fact more high-rise office buildings in countries with more efficient legal systems.

## Spatial versus social mismatch

- Journal of Urban Economics---2013---Yves Zenou

The aim of this paper is to provide a new mechanism based on social interactions, explaining why distance to jobs can have a negative impact on workers' labor-market outcomes, especially ethnic minorities. Building on Granovetter's idea that weak ties are superior to strong ties for providing support in getting a job, we develop a model in which workers who live far away from jobs choose to have less connections to weak ties. Because of the lack of good public transportation in the US, it is costly (both in terms of time and money) to commute to business centers to meet other types of people who can provide other source of information about jobs. If distant minority workers mainly rely on their strong ties, who are more likely to be unemployed, there is then little chance for them of escaping unemployment. It is therefore the separation

in both the social and physical space that prevents ethnic minorities from finding a job.

## Do borrower rights improve borrower outcomes? Evidence from the foreclosure process

- Journal of Urban Economics---2013---Kristopher Gerardi,Lauren Lambie-Hanson,Paul S. Willen

We evaluate the effects of laws designed to protect borrowers from foreclosure. We find that these laws delay but do not prevent foreclosures. We first compare states that require lenders to seek judicial permission to foreclose with states that do not. Borrowers in judicial states are no more likely to cure and no more likely to renegotiate their loans, but the delays lead to a build-up in these states of persistently delinquent borrowers, the vast majority of whom eventually lose their homes. We next analyze a "right-to-cure" law instituted in Massachusetts on May 1, 2008. Using a difference-in-differences approach to evaluate the effect of the policy, we compare Massachusetts with neighboring states that did not adopt similar laws. We find that the right-to-cure law lengthens the foreclosure timeline but does not lead to better outcomes for borrowers.

## US city size distribution: Robustly Pareto, but only in the tail

- Journal of Urban Economics---2013---Yannis Ioannides,Spyros Skouras

We establish empirically using three different definitions of US cities that the upper tail obeys a Pareto law and not a lognormal distribution. We emphasize estimation of a switching point between the body of the city size distribution (which includes most cities) and its upper tail (which includes most of the population). For the 2000 Census Places data, in particular, our preferred model suggests that switching from a lognormal to a Pareto law occurs within a narrow confidence interval around population 60,290, with a corresponding Pareto exponent of 1.25. Most cities obey a lognormal; but the upper tail and therefore most of the population obeys a Pareto law. We obtain qualitatively similar results for the upper tail with the Area Clusters data of

Rozenfeld et al. (2011), and the US Census combined Metropolitan and Micropolitan Areas data, though the shape of that distribution at smaller sizes is sensitive to the definition used.

### **Does it pay to get an A? School resource allocations in response to accountability ratings**

- Journal of Urban Economics---2013---Steven Craig, Scott Imberman, Adam Perdue

This paper examines public school district budgetary responses to school accountability ratings. We identify school district budgetary changes through a “rating shock” due to a major change in school accountability systems in Texas. Texas implemented a new accountability system and new exam, and allowed schools a “gap” year to adjust to the new test. Using the new Texas exam as an exogenous change, we find a 1.5% increase in instructional budgets, mainly for teachers, as a response to a drop in rating. This increase is found to disappear within 3 years, suggesting temporary budget support to “learn” the new system but no long run institutional change.

### **Repairs under imperfect information**

- Journal of Urban Economics---2013---Sanghoon Lee, John Ries, Craig Somerville

We propose a theory of how repairs affect prices under imperfect information. Our model reveals that repairs may lower prices because, if repairs are not always successful, they may reveal negative information about product quality. We also show that the price effect of repairs is increasing in the share of defective products in the population. Under perfect information a repair cannot lower the price and the price effect does not depend on the defective unit share. Data on condominium transactions during Vancouver’s leaky condominium crisis provide support for the model predictions.

### **Swings in commercial and residential land prices in the United States**

- Journal of Urban Economics---2013---Joseph B. Nichols, Stephen Oliner, Michael R. Mulhall

We use a large dataset of land sales dating back to the mid-1990s to construct land price indexes for 23 MSAs in the United States and for the aggregate of those MSAs. The price indexes show a dramatic increase in both commercial and residential land prices over several years prior to their peak in 2006–2007 and a steep descent since then. These fluctuations have exceeded those in well-known indexes of home prices and commercial real estate prices. Because those indexes price a bundle of land and structures, this comparison implies that land prices have been more volatile than structures prices over this period. This result is a key element of the land leverage hypothesis, which holds that home prices and commercial property prices will be more volatile, all else equal, in areas where land represents a larger share of real estate value.

### **Does housing drive state-level job growth? Building permits and consumer expectations forecast a state’s economic activity**

- Journal of Urban Economics---2013---Jack Strauss

National and state-level building permits significantly lead economic activity in nearly all US states over the past three decades, and produce substantially more accurate out-of-sample forecasts of state-level job and income growth than other traditional indicators including the leading indicator index, housing prices and wealth. We demonstrate that building permits have substantially declined before every recession since 1970, and that differences in permits across states before the last seven recessions explain the relative severity of a state’s job and income losses during these recessions. Hence, we can use permits to predict which states will suffer the greatest job losses in a recession. We show further that housing reflects expectations of future economic activity as permits are closely related to movements in consumer expectations, and both lead the business cycle by four quarters. Differences across regions in consumer expectations and permits are also highly correlated, and both can forecast interstate differentials in job and income losses across regions, particularly during recessions.

## **Geographic clustering and productivity: An instrumental variable approach for classical composers**

- Journal of Urban Economics---2013---Karol Borowiecki

It is difficult to estimate the impact of geographic clustering on productivity because of endogeneity issues. I use birthplace-cluster distance as an instrumental variable for the incidence of clustering of prominent classical composers born between 1750 and 1899. I find that geographic clustering causally impacts productivity: composers were writing around one additional influential work every 3 years they spent in a cluster. The best composers and those who migrated to Paris appear to be the greatest beneficiaries of clustering. Placebo tests disclose that the effects are attributable to locating in contemporaneous cluster cities, as opposed to historical cluster locations or large cities in general.

## **Saving and consumption in cities**

- Journal of Urban Economics---2013---David Frame

This paper examines urban residential location and rent determination within a city populated by consumers acting with perfect foresight. In this setting, the consumption and saving decisions of city residents are determined jointly with their choice of location, thereby offering an initial step to understanding how housing services influence non-durable consumption, and vice versa. Housing, supplied by profit-maximizing land owners, is distinguished from more non-descript varieties of durable consumption by the attributes and amenities it provides occupants. These attributes are limited in supply, indivisible, and distinguished by their location in geographic space and time of development.

## **Road pricing with optimal mass transit**

- Journal of Urban Economics---2012---Marvin Kraus

This paper considers the second-best policy problem that arises when auto travel is priced below its marginal

cost and there is a substitute mass transit mode. Using analytical methods, a global comparison is made between the second-best levels of transit service and the fare and their first-best levels. The fact that the results are global permits an application to road pricing not possible with the local results of Kraus (2003).

## **Thick-market effects and churning in the labor market: Evidence from US cities**

- Journal of Urban Economics---2012---Hoyt Bleakley, Jeffrey Lin

Workers change occupation and industry less often in more densely populated areas, a relationship that had not been previously reported. This reduced-form result is robust to standard demographic controls, as well as to including aggregate measures of human capital and sectoral mix. Analysis of displaced worker surveys shows that this relationship is present in cases of involuntary separation as well. In contrast, we actually find the opposite result (higher rates of occupational and industrial switching) for the subsample of younger workers. These results provide evidence consistent with increasing-returns-to-scale matching in labor markets. Results from a back-of-the-envelope calibration suggest that this mechanism has an important role in raising both wages and returns to experience in denser areas.

## **Value added of teachers in high-poverty schools and lower poverty schools**

- Journal of Urban Economics---2012---Tim Sass, Jane Hannaway, Zeyu Xu, David Figlio, Li Feng

Using student-level microdata from 2000–2001 to 2004–2005 from Florida and North Carolina, we compare the effectiveness of teachers in schools serving primarily students from low-income families (>70% free-and-reduced-price-lunch students) with teachers in schools serving more advantaged students. The results show that the average effectiveness of teachers in high poverty schools is in general less than teachers in other schools and there is significantly greater variation in teacher quality among high poverty schools.

These differences are largely driven by less productive teachers at the bottom of the teacher effectiveness distribution in high-poverty schools. The bulk of the quality differential is due to differences in the unmeasured characteristics of teachers. We find that the gain in productivity to more experienced teachers from additional experience is much stronger in lower-poverty schools. The lower return to experience in high-poverty schools does not appear to be a result of differences in the quality of teachers who leave teaching or who switch schools, however. Our findings suggest that measures that induce highly effective teachers to move to high-poverty schools and which promote an environment in which teachers' skills will improve over time are more likely to be successful.

### **Are compact cities environmentally friendly?**

- Journal of Urban Economics---2012---Carl Gaigne,Stephane Riou,Jacques Thisse

There is a wide consensus among international institutions and national governments in favor of compact (i.e. densely populated) cities as a way to improve the ecological performance of the transport system. Indeed, when both the intercity and intra-urban distributions of activities are given, a higher population density makes cities more environmentally friendly because the average commuting length is reduced. However, when we account for the possible relocation of activities within and between cities in response to a higher population density, the latter may cease to hold. Indeed, an increasing-density policy affects prices, wages and land rents, which in turn incentivizes firms and households to change place. This reshapes the urban system in a way that may generate a higher level of pollution. Thus, although an increase in compactness is environmentally desirable when locations are given, compactness may not be environmentally-friendly when one accounts for the general equilibrium effects generated by such a policy.

### **Cultural transmission and discrimination**

- Journal of Urban Economics---2012---Maria Saez-Marti,Yves Zenou

Workers can have good or bad work habits. These traits are transmitted from one generation to the next through a learning and imitation process, which depends on parents' investment in the trait and the social environment where children live. If a sufficiently high proportion of employers have taste-based prejudices against minority workers, we show that their prejudices are always self-fulfilled in steady state and minority workers end up having, on average, worse work habits than majority workers. This leads to a ghetto culture. Affirmative Action can improve the welfare of minorities whereas integration can be beneficial to minority workers but detrimental to workers from the majority group.

### **Energy footprint of the city: Effects of urban land use and transportation policies**

- Journal of Urban Economics---2012---William Larson,Feng Liu,Anthony Yezer

Urban land use and transportation policies have dramatic effects on the density and spatial distribution of residences in large cities. Effects of these policies have been analyzed using numerical urban simulation models. At the same time, the US Energy Information Administration's Residential Energy Consumption Survey has allowed researchers to investigate the relation between household energy consumption and characteristics of housing units.

### **Pain at the pump: Gasoline prices and subjective well-being**

- Journal of Urban Economics---2012---Casey Boyd-Swan,Chris M. Herbst

In recent years, there has been growing interest in the health implications of rising gasoline prices. This paper considers the impact of gasoline prices on subjective well-being, as captured by survey questions on happiness and life satisfaction. Using rich data from the DDB Worldwide Communications Life Style™ survey, we document a negative relationship between gasoline prices and self-reported life satisfaction over the period 1985–2005. The estimated reduction in well-being,

moreover, is found to be nearly twice as large among groups of likely car owners. Interestingly, although rising gasoline prices lead to an immediate deterioration in subjective well-being, analyses of lagged prices suggest that well-being almost fully rebounds 1 year later and changes very little each year thereafter. Our contemporaneous estimates imply that rising gasoline prices generate well-being losses comparable to faltering labor market conditions, and likely offset some of the physical health benefits found in previous research.

### **Urban spatial structure, suburbanization and transportation in Barcelona**

- Journal of Urban Economics---2012---Miquel Àngel Garcia-López

I investigate the effect of improvements to the transportation infrastructure on changes in location patterns of population in Barcelona, Spain between 1991 and 2006. At a census tract level, I verify and extend the finding of Baum-Snow (2007a) that transportation improvements cause suburbanization: (1) improvements to the highway and railroad systems foster population growth in suburban areas; (2) the transit system also affects the location of population inside the central business district (CBD). To estimate the causal relationship between the growth of population (density) and transportation improvements, I rely on an instrumental variables estimation that uses distances to the nearest Roman road, the nearest 19th century main road, and the nearest 19th century railroad network as instruments for the 1991–2001 changes in distance to the nearest highway ramp and the distance to the nearest railroad station.

### **Even small trade costs restore efficiency in tax competition**

- Journal of Urban Economics---2012---Johannes Becker,Marco Runkel

We introduce transport cost of trade in products into the classical Zodrow and Mieszkowski (1986) model of capital tax competition. It turns out that even small levels of transport cost lead to a complete breakdown of

the seminal result, the underprovision of public goods. Instead, there is a symmetric equilibrium with efficient public goods provision in all jurisdictions.

### **Internalization of congestion at US hub airports**

- Journal of Urban Economics---2012---Itai Ater

I study delays and congestion patterns in US hub airports during periods of high flight volume. I find that these periods are longer when the share of flights operated by the hub airline is greater, and these longer periods exhibit shorter delays. These results lend support to recent theoretical work on congestion, implying that hub-airlines take into account the impact of their scheduling decisions on the congestion that they bear. The results may suggest that congestion management solutions implemented at hub airports dominated by one airline could have only a limited impact on congestion in general.

### **Medicaid and the housing and asset decisions of the elderly: Evidence from estate recovery programs**

- Journal of Urban Economics---2012---Nadia Greenhalgh-Stanley

I examine the impact of Medicaid on elderly housing and portfolio decisions by using recent state-by-calendar-year level variation in the Medicaid treatment of owner-occupied housing assets from the adoption of Medicaid estate recovery programs. Prior to the adoption of these programs, the house, which represents the most important non-pension asset to the elderly, was exempt from determining Medicaid eligibility and served as both a place of residence and a store of wealth. Adoption of estate recovery programs changed the owner-occupied housing safety net by making the house eligible for recovery by the government, which increased the implicit tax of holding owner-occupied housing. Using data from 1993 to 2004 in the Health and Retirement Study on elderly individuals, I find that state adoption of estate recovery programs makes the elderly decrease homeownership by 4.6%, decrease home equity by 15%, and also decrease the housing

share of the elderly wealth portfolio. State adoption of these programs results in elderly baseline homeowners being 33% less likely to own their homes at death and more likely to use a trust as a substitute to housing in order to preserve assets and carry out bequest motives at death.

### **Dialects, cultural identity, and economic exchange**

- Journal of Urban Economics---2012---Oliver Falck,Stephan Heblich,Alfred Lameli,Jens Südekum,Jens Suedekum

We study the effect of cultural ties on economic exchange using a novel measure for cultural identity: dialects. We evaluate linguistic micro-data from a unique language survey conducted between 1879 and 1888 in about 45,000 German schools. The recorded geography of dialects comprehensively portrays local cultural similarities that have been evolving for centuries, and provides an ideal opportunity to measure cultural barriers to economic exchange at a fine geographical scale. In a gravity analysis we show that cross-regional migration flows in the period 2000–2006 are positively affected by historical dialect similarity. Using different empirical strategies, we show that this finding indicates highly time-persistent cultural ties that foster economic exchange across regions.

### **Do municipal amalgamations work? Evidence from municipalities in Israel**

- Journal of Urban Economics---2012---Yaniv Reingewertz

Municipal amalgamation reforms are a policy being put to use in most developed countries. The basic rationale for most of these reforms is taking advantage of economies of scale in the municipal provision of public services. However, contrary to conventional wisdom of public officials, the related empirical literature, which relies mostly on descriptive evidence, finds almost no benefits arising from an amalgamation. The purpose of this paper is to present empirical evidence for the fiscal outcomes of municipal amalgamations based on

the Difference-in-Differences methodology. The paper is using an extensive panel data of municipalities in Israel for the years 1999–2007 in order to analyze the Israeli amalgamation reform of 2003. The results indicate that the amalgamations resulted in a decrease of about 9% in municipal expenditures, and are robust to the possibility of selection bias. I find no evidence of a decrease in the level of services provided to the residents of the amalgamated municipalities. The results suggest that municipal amalgamations do bring economies of scale into practice.

### **Relaxing Hukou: Increased labor mobility and China’ s economic geography**

- Journal of Urban Economics---2012---Maarten Bosker,Steven Brakman,Harry Garretsen,Marc Schramm

China’ s Hukou system poses severe restrictions on labor mobility. This paper assesses the possible consequences of relaxing these restrictions for China’ s internal economic geography. We base our analysis on a new economic geography (NEG) model. First, we estimate the important model parameters using data on 264 of China’ s prefecture cities. Second, we use these estimates as inputs in a simulation of the full NEG model under different labor mobility regimes. We find that increased labor mobility leads to more pronounced core–periphery outcomes. Beijing, Shanghai, Guangzhou and Chongqing in particular will further strengthen their dominant place in China’ s urban hierarchy. In addition, two other groups of cities can be distinguished: those in China’ s populous heartland offering preferential access to China’ s enormous internal market, and more peripheral cities that are better shielded from competition with China’ s economic heartland by virtue of their relative remoteness.

### **Migration, housing market, and labor market responses to employment shocks**

- Journal of Urban Economics---2012---Jeffrey Zabel

One reason for the United States’ economic success is the willingness of its residents to follow jobs. House-



holds' decisions to move depend not only on job prospects but also on the relative cost of housing. I investigate how the housing market affects the flow of workers across cities. This occurs through at least two channels: the relative mobility of homeowners versus renters, and the relative cost of housing across markets. I use homeownership rates to measure the former, and use an index that measures house prices across metropolitan statistical areas (MSAs) and the price elasticity of housing supply to capture the latter. To show how variation in these housing market factors not only affects cross-city migration but also the housing and labor markets, I estimate a VAR model of migration, employment, wages, house prices, and new housing supply using annual data from 277 US MSAs for 1990–2006. The response functions based on labor supply and demand shocks show substantial variation when evaluated at different values of the homeownership rate, the price elasticity of housing supply, and relative housing prices. I also allow for spillover effects in the model that reflect the impact of a labor demand shock in the nearest city.

### **Inshoring: The geographic fragmentation of production and inequality**

- Journal of Urban Economics---2012---Wen-Chi Liao

The advent of information technology facilitates the geographic separation of production tasks, which is referred to as offshoring in international contexts and inshoring in domestic contexts. Although the literature on offshoring has flourished, the research regarding inshoring is limited. This paper examines inshoring on both empirical and theoretical fronts. Empirically, it shows that business support services have been increasingly sent to small localities for cost savings while being separated from their downstream industries, which have been consistently concentrated in large cities. Guided by empirical findings, a system of cities model is formulated to analyze inshoring and its welfare impact. The analysis shows that support workers are made better off, primarily because inshoring allows support workers to benefit from higher urban

productivity without bearing urban costs.

### **Strategic fiscal interaction across borders: Evidence from French and German local governments along the Rhine Valley**

- Journal of Urban Economics---2012---Aur lie Casette, Edoardo Di Porto, Dirk Foremny

This article contributes to the literature on local tax interactions. Its novelty lies in its focus on the interactions of local governments across national borders. We use panel data for the French and German municipalities in the Rhine Valley for the period 2000–2007. The local governments of each country influence firms' overall tax burdens, but the tax instruments available at the local level differ. We estimate panel models that distinguish between the effects of competing municipalities belonging to the same country and belonging to the other country. Our empirical model shows that local jurisdictions along borders choose their business tax rates based on those of their domestic neighbors and that foreign fiscal policy does not have an impact on the local domestic tax setting behavior in these contexts.

### **Search and matching in the housing market**

- Journal of Urban Economics---2012---David Genesove, Lu Han

Housing markets clear partly through the time buyers and sellers spend on the market, and the readiness with which they transact with each other. Applying a random matching model to unique multi-year, multi-market survey data on both buyers and sellers, we examine how demand affects housing market liquidity. We find that buyer time on the market, the number of homes buyers visit, and especially seller time on the market all decrease with demand, with a much greater sensitivity to demand growth than its level. This is consistent with a straightforward matching model with a lag in seller response. Our findings imply that the elasticity of the hazard that any given seller will be contacted by a buyer, with respect to the buyer–seller

ratio, is 0.84, assuming a constant returns to scale matching function.

### **Step tolling with bottleneck queuing congestion**

- Journal of Urban Economics---2012---Charles Lindsey,Vincent van den Berg,Erik Verhoef

In most dynamic traffic congestion models, congestion tolls must vary continuously over time to achieve the full optimum. This is also the case in Vickrey (1969) ‘bottleneck model’. To date, the closest approximations of this ideal in practice have so-called ‘step tolls’, in which the toll takes on different values over discrete time intervals, but is constant within each interval. Given the prevalence of step-tolling schemes they have received surprisingly little attention in the literature. This paper compares two step-toll schemes that have been studied using the bottleneck model by Arnott et al. (1990) and Lai (1994). It also proposes a third scheme in which late in the rush hour drivers slow down or stop just before reaching a tolling point, and wait until the toll is lowered from one step to the next step. Such ‘braking’ behaviour has been observed in practice. Analytical derivations and numerical modelling show that the three tolling schemes have different optimal toll schedules and reduce total social costs by different percentages. These differences persist even in the limit as the number of steps approaches infinity. Braking lowers the welfare gain from tolling by 14% to 21% in the numerical example. Therefore, preventing or limiting braking seems important in designing step-toll systems.

### **Timing is everything: Short-run population impacts of immigration in US cities**

- Journal of Urban Economics---2012---Abigail Wozniak,Thomas J. Murray

We provide the first analysis of the short-run causal impact of immigrant inflows on native populations at the local labor market level. Using published statistics from the American Community Surveys of 2000–2010, we examine how immigrant inflow shocks to a metropolitan area affect native populations. We find that immigrant

inflows are associated with increases in local native populations on an annual basis but that these OLS estimates are generally upward biased. Our IV results are purged of this bias, but we still find that an additional immigrant increases the low skill native population by 0.4–0.7 in the concurrent period. To explain this result, we show that immigrant inflows lead to declines in outflows of low skill natives from affected MSAs. This is most pronounced in MSAs from which relocation is arguably more costly, which may disproportionately affect the low skilled. We find short-run responses among high skill natives that are consistent with displacement. The decline in high skilled native populations is driven by high skilled immigrant inflows, and high skilled outflows increase from affected MSAs. We show that these short-run changes are obscured in specifications using longer-run population changes and conclude that the short-run impact of immigrants on native populations differs markedly from their longer-run impact.

### **Congestion in a city with a central bottleneck**

- Journal of Urban Economics---2012---Mogens Fosgerau,André de Palma

We consider dynamic congestion in an urban setting where trip origins are spatially distributed. All travelers must pass through a downtown bottleneck in order to reach their destination in the CBD. Each traveler chooses departure time to maximize general concave scheduling utility. We find that, at equilibrium, travelers sort according to their distance to the destination; the queue is always unimodal regardless of the spatial distribution of trip origins. We construct a welfare maximizing tolling regime, which eliminates congestion. All travelers located beyond a critical distance from the CBD gain from tolling, even when toll revenues are not redistributed, while nearby travelers lose. We discuss our results in the context of acceptability of tolling policies.

## **Intermodal competition in the London–Paris passenger market: High-Speed Rail and air transport**

- Journal of Urban Economics---2012---Christiaan Behrens,Eric Pels

This paper studies inter- and intramodal competition in the London–Paris passenger market during the period 2003–2009. We identify the degree to and conditions under which High-Speed Rail is a viable substitute for airline travel. Using pooled cross-sectional data we estimate multinomial and mixed logit models to examine actual travel behaviour. Our model allows us to analyse the reaction of passenger behaviour on the withdrawal of aviation alternatives and the completion of the High-Speed Rail link between the two cities in November 2007. The results show that travel time and frequency are the main determinants of travel behaviour. The valuation of total travel times changes over the years following the opening of the High-Speed Rail link. Furthermore, we show that the direct elasticity of market share with respect to frequency for a number of aviation alternatives is above 1, indicating that these alternatives are not able to maximise profits. These alternatives subsequently left the market in our sample period. For the remaining aviation alternatives, except for easyJet, we find elasticities of market share with respect to frequency close to 1. Therefore, we conjecture that competition in this market will decline in the long run.

## **Do city climate plans reduce emissions?**

- Journal of Urban Economics---2012---Adam Millard-Ball

More than 600 local governments in the US are developing climate action plans that lay out specific measures to reduce emissions from municipal operations, households and firms. To date, however, it is unclear whether these plans are being implemented or have any causal effects on emissions. Using data from California, I provide the first quantitative analysis of the impacts of climate plans. I find that cities with climate plans have had far greater success in implementing strategies

to reduce greenhouse gas emissions than their counterparts without such plans. For example, they have more green buildings, spend more on pedestrian and bicycle infrastructure, and have implemented more programs to divert waste from methane-generating landfills. I find little evidence, however, that climate plans play any causal role in this success. Rather, citizens' environmental preferences appear to be a more important driver of both the adoption of climate plans and the pursuit of specific emission reduction measures. Thus, climate plans are largely codifying outcomes that would have been achieved in any case.

## **A non-parametric test for industrial specialization**

- Journal of Urban Economics---2012---Stephen B. Billings,Erik Johnson

We introduce a non-parametric microdata based test for industrial specialization and apply it to a single urban area. Our test employs establishment densities for specific industries, a population counterfactual, and a new correction for multiple hypothesis testing to determine the statistical significance of specialization across both places and industries. Results highlight patterns of specialization that are extremely varied, with downtown places specializing in a number of service sector industries, while suburban places specialize in both manufacturing and service industries. Business service industries are subject to more specialization than non-business service industries while the manufacturing sector contains the lowest representation of industries with specialized places. Finally, we compare results for specialization with localization and show that both measures contribute to our understanding of industry and place specific agglomerative forces.

## **The value of scarce water: Measuring the inefficiency of municipal regulations**

- Journal of Urban Economics---2012---Erin Mansur,Sheila M. Olmstead

Rather than allowing urban water prices to reflect scarcity rents during periods of drought-induced excess

demand, policy makers have mandated command-and-control approaches, primarily rationing the use of water outdoors. While such policies are ubiquitous and likely inefficient, economists have not had access to sufficient data to estimate their economic impact. Using unique panel data on residential end-uses of water in 11 North American cities, we examine the welfare implications of urban water rationing in response to drought. Using estimates of expected marginal prices that vary both across and within markets, we estimate price elasticities specific to indoor and outdoor water use. Our results suggest that current policies do target water uses that households, themselves, are most willing to forgo. Nevertheless, we find that rationing outdoor water in cities has costly welfare implications, primarily due to household heterogeneity in willingness-to-pay for scarce water. We find that replacing rationing policies with a market-clearing “drought price” would result in welfare gains of more than 29% of what households in the sample spend each year on water.

### **No cohort left behind?**

- Journal of Urban Economics---2012---Philip Babcock,Kelly Bedard,Jennifer Schulte

Much of the debate over the allocation of education resources focuses on the alleged benefits of smallness—of classroom or school—and is based on evidence from small-scale studies. This paper reframes the question in terms of cohort size. Using national data, we find that a 10% increase in kindergarten enrollment yields a 0.5% increase in cohort shrinkage across early grade transitions, which implies that larger cohorts feature higher rates of retention. Consistent with previous work on class and school size in more restricted settings, this cohort-tracking exercise provides robust evidence at the national level that smallness confers benefits.

### **Fiscal centralization versus decentralization: Growth and welfare effects of spillovers, Leviathan taxation, and capital mobility**

- Journal of Urban Economics---2012---Angus Chu,C.C. Yang

This paper develops an endogenous growth model with spillovers of public goods, Leviathan taxation, and mobile capital to examine the relative merits of centralized and decentralized fiscal systems for economic growth and social welfare. We show that a decentralized system dominates a centralized system in terms of economic growth; however, the difference in social welfare between a decentralized and a centralized system is non-monotonic and displays a hump-shaped relationship with respect to capital mobility. Since higher capital mobility induces stronger tax competition, this finding implies that there is an optimal degree of tax competition; some tax competition is desirable, but fierce tax competition may be harmful. We also show that there is a critical level of spillovers of public goods above which centralization dominates decentralization in terms of social welfare, as in previous studies; however, if spillovers are below this critical level, capital mobility also matters in the welfare comparison between centralized and decentralized systems.

### **Closing schools in a shrinking district: Do student outcomes depend on which schools are closed?**

- Journal of Urban Economics---2012---John Engberg,Brian Gill,Gema Zamarro,Ron Zimmer

In the last decade, many cities around the country have needed to close schools due to declining enrollments and low achievement. School closings raise concerns about the possible negative impacts on student achievement, neighborhoods, families, and teaching staff. This study examines an anonymous urban district that, faced with declining enrollment, chose to make student achievement a major criterion in determining which schools would be closed. The district targeted low-performing schools in its closure plan, and sought to move their students to higher-performing schools. We estimate the impact of school closures on student test scores and attendance rates by comparing the growth of these measures among students differentially affected by the closures. We use residential assignment to school as an instrument to address non-random sorting of students into new schools. We also statistically control for

the contemporaneous effects of other reforms within the district. Results show that students displaced by school closures can experience adverse effects on test scores and attendance, but these effects can be minimized when students move to schools that are higher-performing (in value-added terms). Moreover, the negative effect on attendance disappears after the first year in the new school. Meanwhile, we find no adverse effects on students in the schools that are receiving the transferring students.

### **The foreclosure discount: Myth or reality?**

- Journal of Urban Economics---2012---John P. Harding, Eric Rosenblatt, Vincent Yao

Foreclosed properties sell at lower prices than do nearby non-distressed properties. Of particular concern, is whether there is a “stigma” foreclosure discount whereby REO properties sell at lower prices simply because they have been involved in foreclosure proceedings. To the extent that such a discount exists, arbitrage opportunities exist and the associated market failure has significant policy implications. We examine the foreclosure discount from a different perspective than prior researchers by comparing holding period returns earned by purchasers of REOs with those earned by purchasers of similar non-distressed properties. Our results show that the majority of REO purchasers do not earn economically significant excess returns. On average, the implied market discount is less than typical transaction costs. We also find evidence that REO properties and buyers vary systematically from their counterparts in the non-distressed market segment and that REO attribute prices differ from those of non-distressed properties. Overall, our evidence suggests that the market for REOs operates efficiently: lenders are not irrationally dumping REO properties and REO investors are not reaping extraordinary profits.

### **Effect of immigrant nurses on labor market outcomes of US nurses**

- Journal of Urban Economics---2012---Robert Kaestner, Neeraj Kaushal

We study the effect of immigration of foreign-trained, registered nurses (RNs) on the employment and wages of US-trained RNs. We use the “area” approach and study effects of immigration in labor markets defined by the state. We find substantial evidence that immigration by foreign-trained nurses increases the supply of nurses and that this increase in supply is associated with a decrease in annual earnings. Estimates suggest that a 10% increase in supply due to immigration is associated with a 1–4% decrease in annual earnings, although most estimates were not statistically significant and we did not find a similar association between an increase in supply and wages.

### **Subprime mortgages and the housing bubble**

- Journal of Urban Economics---2012---Jan Brueckner, Paul S. Calem, Leonard Nakamura

This paper explores the link between the house-price expectations of mortgage lenders and the extent of subprime lending. It argues that bubble conditions in the housing market are likely to spur subprime lending, with favorable price expectations easing the default concerns of lenders and thus increasing their willingness to extend loans to risky borrowers. Since the demand created by subprime lending feeds back onto house prices, such lending also helps to fuel an emerging housing bubble. These ideas are illustrated in a theoretical model, and tentative support is found in empirical work exploring the connection between price expectations and the extent of subprime lending.

### **Does home owning smooth the variability of future housing consumption?**

- Journal of Urban Economics---2012---Andrew Paciorek, Todd Sinai

We show that the hedging benefit of owning a home reduces the variability of housing consumption after a move. When a current home owner’s house price covaries positively with housing costs in a future city, changes in the future cost of housing are offset by commensurate changes in wealth before the move. Using Census micro-data, we find that the cross-sectional

variation in house values subsequent to a move is lower for home owners who moved between more highly co-varying cities. Our preferred estimates imply that an increase in covariance of one standard deviation reduces the variance of subsequent housing consumption by about 11%. Households at the top end of the covariance distribution who are likely to have owned large homes before moving get the largest reductions, of up to 40% relative to households at the median.

### **The influence of gay and lesbian coupled households on house prices in conservative and liberal neighborhoods**

- Journal of Urban Economics---2012---David Christafore,Susane Leguizamon

Gays and lesbians perceive themselves to be targets of discrimination in the housing market. Previous research has found that the presence of gays and lesbians is associated with increased housing values. We reconcile the perceived discrimination and research results by classifying neighborhoods as more conservative or liberal according to voting outcomes of the “Defense Of Marriage Act” . Using a data set comprised of over 20,000 house sale observations, we show that an increase in the number of same-sex coupled households is associated with an increase in house prices in more liberal neighborhoods and a decrease in house prices in more conservative neighborhoods. This suggests that gay and lesbian coupled households do experience prejudice in conservative neighborhoods.

### **Dressed for success? The effect of school uniforms on student achievement and behavior**

- Journal of Urban Economics---2012---Elisabetta Gentile,Scott Imberman

Uniform use in public schools is rising, but we know little about how they affect students. Using a unique dataset from a large urban school district in the south-west United States, we assess how uniforms affect behavior, achievement and other outcomes. Each school in the district determines adoption independently, providing variation over schools and time. By including

student and school fixed-effects we find evidence that uniform adoption improves attendance in secondary grades, while in elementary schools they generate large increases in teacher retention.

### **School district quality and property values: Examining differences along school district boundaries**

- Journal of Urban Economics---2012---Paramita Dhar,Stephen Ross

Examining differences across school district boundaries rather than school attendance zone boundaries has several advantages. These advantages include being applicable when attendance zones are not available or less relevant to educational outcomes as arises with within district school choice and for examining the effect of factors like school spending or property taxes that do not vary within districts. However, school district boundaries have often been in place for many years allowing households to sort based on school quality and potentially creating distinct neighborhoods on either side of boundaries. We estimate models of housing prices using repeated cross-sections of housing transactions near school district boundaries in Connecticut. These models exploit changes over time to control for across boundary differences in neighborhood quality. We find significant effects of test scores on property values, but those effects are notably smaller than both OLS and traditional boundary fixed effects estimates.

### **Economic growth, size of the agricultural sector, and urbanization in Africa**

- Journal of Urban Economics---2012---Markus Brückner

This paper uses variations in international commodity prices and rainfall to construct instrumental variables estimates of the within-country effect that changes in the size of the agricultural sector and GDP per capita growth have on the urbanization rate. For a panel of 41 African countries during the period 1960–2007, the paper’ s three main findings are that: (i) decreases in

the share of agricultural value added lead to a significant increase in the urbanization rate; (ii) conditional on changes in the share of agricultural value added GDP per capita growth does not significantly affect the urbanization rate; (iii) increases in the urbanization rate had a significant negative average effect on GDP per capita growth.

### **The geographic accessibility of child care subsidies and evidence on the impact of subsidy receipt on childhood obesity**

- Journal of Urban Economics---2012---Chris M. Herbst,Erdal Tekin

This paper examines the impact of the spatial accessibility of public human services agencies on the likelihood of receiving a child care subsidy among disadvantaged mothers with young children. In particular, we collect data on the location of virtually every human services agency in the US and use this information to calculate the approximate distance that families must travel from home in order to reach the nearest office that administers the subsidy application process. Using data from the Kindergarten cohort of the Early Childhood Longitudinal Study (ECLS-K), our results indicate that an increase in the distance to a public human services agency reduces the likelihood that a family receives a child care subsidy. Specifically, we estimate an elasticity of subsidy receipt with respect to distance of  $-0.13$ . The final section of the paper provides an empirical application in which we use variation in families' travel distance to identify the causal effect of child care subsidies on children's weight outcomes. Our instrumental variables estimates suggest that subsidized child care leads to sizeable increases in the prevalence of overweight and obesity among low-income children.

### **Regulation in the market for education and optimal choice of curriculum**

- Journal of Urban Economics---2012---Gerald Eisenkopf,Ansgar Wohlschlegel

We analyze educational institutions' incentives to set

up demanding or lax curricula in duopolistic markets for education with endogenous enrolment of students. We assume that there is a positive externality from student achievement to the local economy. Comparing the case of regulated tuition fees with an unregulated market, we identify the following inefficiencies: Under regulated tuition fees schools will set up inefficiently lax curricula in an attempt to please low-quality students even if schools internalize some of the externality. On the other hand, unregulated schools set up excessively differentiated curricula in order to relax competition in tuition fees. Deregulation gets more attractive if a larger fraction of the externality is internalized.

### **Understanding Business Improvement District formation: An analysis of neighborhoods and boundaries**

- Journal of Urban Economics---2012---Rachel Meltzer

Business Improvement Districts (BIDs) provide supplemental services to urban commercial corridors using funds from member assessments. They have become a very popular urban revitalization tool, but their formation is still largely unexplained. Theory implies that BIDs will form if they add to aggregate welfare and if the marginal net benefit of membership is positive. I test this for the neighborhood overall and at the BID boundary. Using unique, micro-level and longitudinal data from New York City, I employ survival analysis methods to estimate the likelihood of a neighborhood forming a BID. I then estimate the likelihood of the marginal property's BID membership by comparing the characteristics of properties located immediately inside and outside of the BID boundaries. I find that BIDs are more likely to form when there is more commercial space over which the BID benefits can be capitalized and when there is homogeneity in service and spending preferences across properties. BIDs also tend to form in neighborhoods that possess signs of appreciation and growth. Generally, BIDs are more likely to form in neighborhoods with higher valued properties with the exception of very wealthy areas. The BID boundary, however, is comprised of

relatively less valuable properties.

### **A political economy model of road pricing**

- Journal of Urban Economics---2012---Bruno De Borger, Stef Proost

In this paper, we use a simple majority voting model to study the introduction of urban congestion tolls. The model allows for different types of uncertainty and considers different uses of the toll revenues. The following results are obtained. First, we show that individual uncertainty with respect to modal substitution costs may imply that a majority votes against road pricing ex ante, although a majority would have been in favor after its introduction ex post. Moreover, if a majority is against road pricing ex ante, there will also be no majority for organizing an experiment that would take away the individual uncertainty. Second, political uncertainty with respect to the use of the revenues corroborates the finding that ex ante more voters will be against the introduction of tolls. Third, both types of uncertainty suggest that fewer voters are against road pricing when toll revenues are used to subsidize public transport than when they are redistributed to all voters. Importantly, the results of this paper are consistent with a number of recent empirical observations on efforts to introduce road pricing, including the systematic rejection of road pricing in referenda, the more favorable attitudes towards road pricing after than before its introduction, and tying the toll revenues to support public transport.

### **Residential land use regulation and the US housing price cycle between 2000 and 2009**

- Journal of Urban Economics---2012---Haifang Huang, Yao Tang

In a sample covering more than 300 cities in the US from January 2000 to July 2009, we find that more restrictive residential land use regulations and geographic land constraints are linked to larger booms and busts in housing prices. The natural and man-made constraints also amplify price responses to the subprime mortgage credit expansion during the decade, leading

to greater price increases in the boom and subsequently bigger losses. Contrary to prior literature, our findings indicate a significant link between supply inelasticity and price declines during the bust, whereas Glaeser et al. (2008) found little evidence of such a relationship from an earlier downturn from 1989 to 1996.

### **Broadband and local growth**

- Journal of Urban Economics---2012---Jed Kolko

I find a positive relationship between broadband expansion and local economic growth. This relationship is stronger in industries that rely more on information technology and in areas with lower population densities. Instrumenting for broadband expansion with slope of terrain leans in the direction of a causal relationship, though not definitively.

### **Soft budget constraints and strategic interactions in subnational borrowing: Evidence from the German States, 1975–2005**

- Journal of Urban Economics---2012---Thushyanthan Baskaran

Cooperative federations are usually characterized by the existence of bailout guarantees and intergovernmental transfer schemes. This paper explores whether such features of cooperative federations lead to subnational soft budget constraints using panel data from the German States covering the 1975–2005 period. The methodology is based on the premise that subnational governments' borrowing will exhibit vertical and horizontal strategic interactions if they operate under soft budget constraints. Therefore, a test for strategic interactions in subnational borrowing can be used to infer whether a cooperative federation like Germany is susceptible to soft budget constraints. The results suggest that state borrowing in Germany exhibited horizontal but not vertical interactions during the time-frame of the analysis. This indicates (i) that German States faced soft budget constraints and (ii) that they were more concerned about the likelihood of a bailout than about its volume.



## **Long-term earnings and employment effects of housing voucher receipt**

- Journal of Urban Economics---2012---Deven Carlson,Robert Haveman,Tom Kaplan,Barbara Wolfe

Using a propensity score matching approach coupled with difference-in-differences regression analysis, we estimate the effect of housing voucher receipt on the employment and earnings of a large longitudinal sample of low-income families for 6years following voucher receipt. Our results indicate that voucher receipt has little effect on employment, but a negative effect on earnings. The negative earnings effect is largest in the years immediately following initial receipt, and fades out over time. In addition, we find that the pattern of recipient earnings responses to voucher receipt differs substantially across demographic subgroups. Several robustness tests are run to support the reliability of our findings. We discuss the implications of our findings for research and policy.

## **Primary prevention and health outcomes: Treatment of residential lead-based paint hazards and the prevalence of childhood lead poisoning**

- Journal of Urban Economics---2012---David J. Jones

In order to gain a better understanding of the effects of an investment in primary prevention on health, I investigate the impact of treatment of lead-based paint hazards in housing units (the preventive action) on childhood lead poisoning (the health outcome) at the census tract level in Chicago, IL. I use the findings from the analysis to simulate and then weigh the costs of lead interventions against the potential benefits of reducing blood lead levels in children. Childhood lead poisoning presents an interesting case study of the potential of preventive care in reducing the prevalence of a disease. There is a clear, well-defined pathway of exposure (deteriorating lead paint in older homes) and no method of secondary care that effectively mitigates the negative health effects. I find that a one-tenth percentage point increase in the proportion of older housing units that have been remediated is associated

with a four-tenths percentage point reduction in the prevalence of childhood lead poisoning, an elasticity of roughly 0.5. Citywide, this is roughly 2.5 cases of lead poisoning averted for every housing unit remediated. Furthermore, I find evidence that the effect of remediations in preventing the disease has improved over time. The lower bound estimates of the benefits associated with the reduction in lead poisoning – increased expected lifetime earnings and reduced medical expenditures – are two to twenty times the estimated costs of the remediations.

## **Local labor market impacts of energy boom-bust-boom in Western Canada**

- Journal of Urban Economics---2012---Joseph Marchand

The impacts of energy price boom and bust are analyzed through the differential growth in employment and earnings between local labor markets with and without energy resources in Western Canada. The estimated differentials attributed to the boom-induced labor demand shocks show significant direct and indirect impacts on the earnings and employment within the energy extraction and other non-energy local sectors respectively. The local job multipliers indicate that job creation within the energy extraction sector leads to modest job creation within the non-energy local sectors during boom periods. For every ten energy extraction jobs created during a boom period, approximately three construction jobs, two retail jobs, and four and a half service jobs are created.

## **The mechanisms of agglomeration: Evidence from the effect of inter-industry relations on the location of new firms**

- Journal of Urban Economics---2011---Jordi Jofre-Monseny,Raquel Marín-López,Elisabet Viladecans-Marsal

The objective of this paper is to explore the relative importance of each of Marshall's agglomeration mechanisms by examining the location of new manufacturing firms in Spain. In particular, we estimate the count

of new firms by industry and location as a function of (pre-determined) local employment levels in industries that: (1) use similar workers (labor market pooling); (2) have a customer-supplier relationship (input sharing); and (3) use similar technologies (knowledge spillovers). We examine the variation in the creation of new firms across cities and across municipalities within large cities to shed light on the geographical scope of each of the three agglomeration mechanisms. We find evidence of all three agglomeration mechanisms, although their incidence differs depending on the geographical scale of the analysis.

### **Subprime mortgage default**

- Journal of Urban Economics---2011---James Kau,Donald C. Keenan,Constantine Lyubimov,V. Carlos Slawson

This paper constructs a reduced-form credit risk model of mortgage default. The data used is of privately-securitized subprime ARMs (adjustable rate mortgages), originated between 1997 and 2008, and observed between 2000 and 2009. The period studied thus encompasses the beginning of the subprime crisis. Given the estimated model, contractual properties of the loans are then used to infer the market price of default risk for the various quarters of origination. It is empirically determined that a change in the inherent nature of borrowers led to a deterioration in their default performance, a change which can be first detected in late 2004. On the other hand, the evidence also indicates that the secondary mortgage market became aware of this change at about this same time. The large rise in defaults in 2007 cannot, therefore, be attributed to any surprise other than the unexpectedly large fall in housing prices.

### **What drives returns to euro area housing? Evidence from a dynamic dividend-discount model**

- Journal of Urban Economics---2011---Paul Hiebert,Matthias Sydow

We apply a dynamic dividend-discount model to analyse housing returns for eight euro area countries comprising over 90% of euro area GDP, both individually and as a panel. A vector autoregressive model (VAR) is estimated for four variables - excess return to housing, rents, the real interest rate and real disposable per capita income - using quarterly data over the period 1978-2009. This empirical investigation - which allows for a decomposition of house price movements into movements in rent (cash-flow) and expected return news components - indicates that the bulk of the variability of euro area house price movements can be attributed to movements in fundamentals. There remains nonetheless an important but less sizeable influence of market-wide (or expected-return) variations in house prices. Country-specific estimation indicates considerable heterogeneity around the euro area result, both for what concerns long-term impacts and dynamics. Notably, changes in expected returns play a relatively strong role in the house prices of Ireland and Spain.

### **Do landlords discriminate in the rental housing market? Evidence from an internet field experiment in US cities**

- Journal of Urban Economics---2011---Andrew Hanson,Zackary Hawley

This paper tests for racial discrimination in the rental housing market using matched-pair audits conducted via e-mail for rental units advertised on-line. We reveal home-seekers' race to landlords by sending e-mails from names with a high likelihood of association with either whites or African Americans. Generally, discrimination occurs against African American names; however, when the content of the e-mail messages insinuates home-seekers with high social class, discrimination is non-existent. Racial discrimination is more severe in neighborhoods that are near "tipping points" in racial composition, and for units that are part of a larger building.

## Low-income housing development and crime

- Journal of Urban Economics---2011---Matthew Freedman,Emily Owens

This paper examines the effect of rental housing development subsidized by the federal government's Low-Income Housing Tax Credit (LIHTC) program on local crime. Under the LIHTC program, certain high-poverty census tracts receive Qualified Census Tract (QCT) status, which affects the size of the tax credits developers receive for building low-income housing. Changes in federal rules determining QCT status generate quasi-experimental variation in the location of LIHTC projects. Exploiting this variation, we find that low-income housing development in the poorest neighborhoods brings with it significant reductions in violent crime that are measurable at the county level. There are no detectable effects on property crime.

## The mechanisms of agglomeration: Evidence from the effect of inter-industry relations on the location of new firms

- Journal of Urban Economics---2011---Jordi Jofre-Monseny,Raquel Marín-López,Elisabet Viladecans-Marsal

The objective of this paper is to explore the relative importance of each of Marshall's agglomeration mechanisms by examining the location of new manufacturing firms in Spain. In particular, we estimate the count of new firms by industry and location as a function of (pre-determined) local employment levels in industries that: (1) use similar workers (labor market pooling); (2) have a customer-supplier relationship (input sharing); and (3) use similar technologies (knowledge spillovers). We examine the variation in the creation of new firms across cities and across municipalities within large cities to shed light on the geographical scope of each of the three agglomeration mechanisms. We find evidence of all three agglomeration mechanisms, although their incidence differs depending on the geographical scale of the analysis.

## Subprime mortgage default

- Journal of Urban Economics---2011---James B. Kau,Donald C. Keenan,Constantine Lyubimov,V. Carlos Slawson

This paper constructs a reduced-form credit risk model of mortgage default. The data used is of privately-securitized subprime ARMs (adjustable rate mortgages), originated between 1997 and 2008, and observed between 2000 and 2009. The period studied thus encompasses the beginning of the subprime crisis. Given the estimated model, contractual properties of the loans are then used to infer the market price of default risk for the various quarters of origination. It is empirically determined that a change in the inherent nature of borrowers led to a deterioration in their default performance, a change which can be first detected in late 2004. On the other hand, the evidence also indicates that the secondary mortgage market became aware of this change at about this same time. The large rise in defaults in 2007 cannot, therefore, be attributed to any surprise other than the unexpectedly large fall in housing prices.

## What drives returns to euro area housing? Evidence from a dynamic dividend-discount model

- Journal of Urban Economics---2011---Paul Hiebert,Matthias Sydow

We apply a dynamic dividend-discount model to analyse housing returns for eight euro area countries comprising over 90% of euro area GDP, both individually and as a panel. A vector autoregressive model (VAR) is estimated for four variables – excess return to housing, rents, the real interest rate and real disposable per capita income – using quarterly data over the period 1978–2009. This empirical investigation – which allows for a decomposition of house price movements into movements in rent (cash-flow) and expected return news components – indicates that the bulk of the variability of euro area house price movements can be attributed to movements in fundamentals. There

remains nonetheless an important but less sizeable influence of market-wide (or expected-return) variations in house prices. Country-specific estimation indicates considerable heterogeneity around the euro area result, both for what concerns long-term impacts and dynamics. Notably, changes in expected returns play a relatively strong role in the house prices of Ireland and Spain.

### **Do landlords discriminate in the rental housing market? Evidence from an internet field experiment in US cities**

- Journal of Urban Economics---2011---Andrew Hanson,Zackary Hawley

This paper tests for racial discrimination in the rental housing market using matched-pair audits conducted via e-mail for rental units advertised on-line. We reveal home-seekers' race to landlords by sending e-mails from names with a high likelihood of association with either whites or African Americans. Generally, discrimination occurs against African American names; however, when the content of the e-mail messages insinuates home-seekers with high social class, discrimination is non-existent. Racial discrimination is more severe in neighborhoods that are near "tipping points" in racial composition, and for units that are part of a larger building.

### **Low-income housing development and crime**

- Journal of Urban Economics---2011---Matthew Freedman,Emily Owens

This paper examines the effect of rental housing development subsidized by the federal government's Low-Income Housing Tax Credit (LIHTC) program on local crime. Under the LIHTC program, certain high-poverty census tracts receive Qualified Census Tract (QCT) status, which affects the size of the tax credits developers receive for building low-income housing. Changes in federal rules determining QCT status generate quasi-experimental variation in the location of LIHTC projects. Exploiting this variation, we find that low-income housing development in the poorest

neighborhoods brings with it significant reductions in violent crime that are measurable at the county level. There are no detectable effects on property crime.

### **Demand substitution across US cities:**

#### **Observable similarity and home price correlation**

- Journal of Urban Economics---2011---DeForest McDuff

This paper studies demand substitution in the context of US cities. Demand substitution occurs when individuals on the margin between certain city pairs affect demand patterns in the aggregate, causing certain cities to be better substitutes than others. Using a discrete model of city choice, I derive two predictions for migration flows and test them empirically using city-to-city migration data from the US Census. I show that cities which are similar on a variety of observable measures have higher levels of gross migration flows in the steady state and higher net migration flows in response to labor demand shocks. Finally, I propose pairwise correlation in metropolitan home prices as a price-based measure of substitutability and show that it contains substantial predictive power for migration flows relative to observable similarity.

### **A simple dynamic decentralized leadership model with private savings and local borrowing regulation**

- Journal of Urban Economics---2011---Nobuo Akai,Motohiro Sato

This paper considers a simple dynamic decentralized leadership model with local borrowing and regional productivity-enhancing investment. In this model, the central government is benevolent but cannot commit to ex post intergovernmental transfer policies, while local governments act strategically after accounting for the ex post motives of the central government. We then investigate inefficiency in the subgame perfect equilibrium. We analyze the effect of central control on local borrowing and show that central control is of no benefit because ex ante local taxation works to offset it. We find the model yields different policy implications

that central control is effective when extended to the case of residential mobility.

### **The real price of parking policy**

- Journal of Urban Economics---2011---Jos van Ommeren,Derk Wentink,Jasper Dekkers

This paper is the first to empirically examine the residents' willingness to pay for on-street parking permits as well as the cost of cruising using an identification methodology based on house prices for Amsterdam. The residents' cost of cruising is about [euro]1 per day. The residents' willingness to pay for a parking permit is about [euro]10 per day.

### **Production in advance versus production to order: The role of downstream spatial clustering and product differentiation**

- Journal of Urban Economics---2011---Lorenzo Casaburi,Gaetano Alfredo Minerva

In every production process, suppliers have to decide whether an item should be produced and stored as inventory before an explicit purchase order is received (production in advance), or whether it should be produced only after such an order is received (production to order). We study the determinants of this firm-level choice. We present a simple conceptual framework to derive predictions that we subsequently test in the empirical analysis. We argue that an increment in buyers' spatial concentration benefits production in advance more in homogenous industries than in differentiated ones, while the benefits for production to order are larger as product differentiation increases. Consequently, the propensity to adopt one of the two production modes, following an increase in the number of local downstream buyers, changes according to the degree of product differentiation of the goods. Relying on a large data set of Italian manufacturing firms, we find empirical support to our ideas.

### **Outsourcing, labor market pooling, and labor contracts**

- Journal of Urban Economics---2011---Pierre Picard,David Wildasin

This paper considers the interaction between input sharing and labor market pooling in urban areas. In particular, it examines the impact of the size of a city and business risks on the organizational structures of firms located in urban agglomerations, and it also discusses the impact of organizational structure on incentives to insure workers against income risks. It is shown that manufacturing firms suffer from a coordination game in their decision to outsource production. The existence of idiosyncratic risks causes manufacturers to refrain from outsourcing. The incentives to offer wage and employment protection to workers are more pronounced when manufacturers outsource the production of their inputs to a local market, which mitigates the impact of labor market pooling.

### **Exclusionary policies in urban development: Under-servicing migrant households in Brazilian cities**

- Journal of Urban Economics---2011---Leo Feler,J. Vernon Henderson

Localities in developed countries often enact regulations to deter low-income households from moving in. In developing countries, such restrictions lead to the emergence of informal housing sectors. To deter low-income migrants, localities in developing countries withhold public services to the informal housing sector. Using a large sample of Brazilian localities, we examine migration and exclusion, focusing on the public provision of water to small houses where low-income migrants are likely to live. Withholding water connections reduces the locality growth rate, particularly of low-education households. In terms of service provision, during dictatorship in Brazil, we find evidence of strategic exclusion, where localities appear to withhold services to deter in-migration. We also find evidence of strategic interactions among localities within metro areas in their setting of service levels: if one locality

provides more services to migrant households, other localities respond by withholding service.

## **Prostitution 2.0: The changing face of sex work**

- Journal of Urban Economics---2011---Anthony Cunningham,Todd D. Kendall

The use of Internet technology for solicitation by sex workers has raised important legal and regulatory questions. We provide a description of the new institutions that facilitate prostitution online, and their potential market effects. We then supply some of the first evidence on several key parameters of interest to policymakers. First, we find that workers who solicit online largely represent growth in the overall prostitution market, as opposed to simple displacement of the offline, street-focused market, although we find sizeable displacement effects among sex workers in their 30s and 40s. Using a newly-implemented survey, we also find that most sex workers who solicit online engage in lower-risk behaviors than traditional street-based workers; however, workers close to the margin for migration from outdoor work bring riskier business and sexual practices with them as they enter the off-street-sector.

## **Is there an equilibrating relationship between house prices and replacement cost? Empirical evidence from Berlin**

- Journal of Urban Economics---2011---Rainer Schulz,Axel Werwatz

It is a feature of competitive markets with forward-looking participants that a good's benefit and its production cost are equalized in equilibrium and that no resources are wasted during the adjustment process. For housing markets, there is mixed evidence whether they meet this standard of allocative efficiency. Based on a unique data set with rich information on prices and cost, we examine the market for single-family houses in Germany's capital Berlin. At the aggregate market level, we find that prices and cost tend to equalize in the long run. Short-run adjustment appears to be sufficiently fast and properly anticipated to prevent systematic excess profit opportunities. At the cross

sectional level of individual houses, we find support that resources are allocated efficiently between different market segments. Taken together, our results provide sufficient evidence that the market in Berlin is efficient.

## **Job search in thick markets**

- Journal of Urban Economics---2011---Sabrina Di Addario

I analyze empirically the effects of urban and industrial agglomeration on both search behavior and the efficiency of matching. The analysis is based on a unique panel data set from the Italian Labor Force Survey micro-data, covering 520 randomly drawn Local Labor Market Areas (66% of the total) over the four quarters of 2002. I compute transition probabilities from non-employment to employment by jointly estimating the probability of searching and the probability of finding a job conditional on having searched. I then test whether these are affected by market size, industrial variety and/or industry specialization. The main results indicate that market size and industry-specialization raise job seekers' chances of finding employment (conditional on having searched), while industrial variety is not significantly different from zero. Finally, the effect of agglomeration on non-employed individuals' search behavior cannot be significantly distinguished from zero.

## **Evaluating efficient public good provision: Theory and evidence from a generalised conditional efficiency model for public libraries**

- Journal of Urban Economics---2011---Kristof De Witte,Benny Geys

Provision of most public goods (e.g., health care, libraries, education, police, fire protection, utilities) can be characterized by a two-stage production process. In the first-stage, basic inputs (e.g., labor and capital) are used to generate service potential (e.g., opening hours, materials), which is then, in the second-stage, transformed into observed outputs (e.g., school outcomes, library circulation, crimes solved). As final outputs are also affected by demand-side factors, conflating

both production stages likely leads to biased inferences about public productive (in)efficiency and its determinants. Hence, this paper uses a specially tailored, fully non-parametric efficiency model allowing for both outlying observations and heterogeneity to analyse efficient public good provision in stage one only. We thereby employ a dataset comprising all 290 Flemish public libraries. Our findings suggest that ideological stance of the local government, wealth and density of the local population and source of library funding (i.e., local funding versus intergovernmental transfers) strongly affect library productive efficiency.

### **Supersizing supercenters? The impact of Walmart Supercenters on body mass index and obesity**

- Journal of Urban Economics---2011---Charles Courtemanche, Art Carden

Researchers have linked the rise in obesity to technological progress reducing the opportunity cost of food consumption and increasing the opportunity cost of physical activity. We examine this hypothesis in the context of Walmart Supercenters, whose advancements in retail logistics have translated to substantial reductions in the prices of food and other consumer goods. Using data from the Behavioral Risk Factor Surveillance System matched with Walmart Supercenter entry dates and locations, we examine the effects of Supercenters on body mass index (BMI) and obesity. We account for the endogeneity of Walmart Supercenter locations with an instrumental variables approach that exploits the unique geographical pattern of Supercenter expansion around Walmart's headquarters in Bentonville, Arkansas. An additional Supercenter per 100,000 residents increases average BMI by 0.24 units and the obesity rate by 2.3% points. These results imply that the proliferation of Walmart Supercenters explains 10.5% of the rise in obesity since the late 1980s, but the resulting increase in medical expenditures offsets only a small portion of consumers' savings from shopping at Supercenters.

### **Spatial concentration and plant-level productivity in France**

- Journal of Urban Economics---2011---Philippe Martin, Thierry Mayer, Florian Mayneris

This paper analyzes empirically the effect of spatial agglomeration of activities on plant-level productivity, using French firm and plant-level data from 1996 to 2004. We exploit short-run variations of variables by making use of GMM estimation. This allows us to control for endogeneity biases that the estimation of agglomeration economies typically encounters. This means that our paper focuses on a subset of agglomeration economies, the short-run ones. Our results show that French plants benefit from localization economies, but we find very little - if any - evidence of urbanization economies. We also show that those localization benefits are relatively well internalized by firms in their location choice: we find very little difference between the geography that would maximize productivity gains in the short-run and the geography actually observed.

### **Quasi-experimental evidence on the effect of aircraft noise on apartment rents**

- Journal of Urban Economics---2011---Stefan Boes, Stephan Nuesch

Inferring the implicit price of an environmental good hinges on *ceteris paribus* conditions that are often hard to justify. This paper uses an unexpected change in flight regulations as source of exogenous variation and identifies aircraft noise effects from price adjustments in the market for rental apartments. Controlling for spatial and apartment heterogeneity, we find that aircraft noise reduces apartment rents by about 0.5% per decibel. Our results indicate (i) that noise discounts are overestimated in cross-sectional studies because aircraft noise tends to be negatively correlated with omitted neighborhood and housing amenities and (ii) that noise effects are unlikely to be constant over the entire noise range.

## **Sprawl and blight**

- Journal of Urban Economics---2011---Jan Brueckner,Robert Helsley

The objective of this paper is to show how the same market failures that contribute to urban sprawl also contribute to urban blight. The paper develops a simple dynamic model in which new suburban and older central-city properties compete for mobile residents. The level of housing services generated by older properties depends on current maintenance or reinvestment expenditures. In this setting, market failures that reduce the cost of occupying suburban locations, thus leading to excessive suburban development, also depress central-city housing prices and undermine maintenance incentives, leading to deficient levels of central-city reinvestment. Corrective policies that shift population from the suburbs to the center result in higher levels of reinvestment in central-city housing, therefore reducing blight.

## **On the equivalence of location choice models: Conditional logit, nested logit and Poisson**

- Journal of Urban Economics---2011---Kurt Schmidheiny,Marius Brühlhart

It is well understood that the two most popular empirical models of location choice - conditional logit and Poisson - return identical coefficient estimates when the regressors are not individual specific. We show that these two models differ starkly in terms of their implied predictions. The conditional logit model represents a zero-sum world, in which one region's gain is the other regions' loss. In contrast, the Poisson model implies a positive-sum economy, in which one region's gain is no other region's loss. We also show that all intermediate cases can be represented as a nested logit model with a single outside option. The nested logit turns out to be a linear combination of the conditional logit and Poisson models. Conditional logit and Poisson elasticities mark the polar cases and can therefore serve as boundary values in applied research.

## **Do liberal cities limit new housing development? Evidence from California**

- Journal of Urban Economics---2011---Matthew Kahn

Traditional explanations for why some communities block new housing construction focus on incumbent home owner incentives to block entry. Local resident political ideology may also influence community permitting decisions. This paper uses city level panel data across California metropolitan areas from 2000 to 2008 to document that liberal cities grant fewer new housing permits than observationally similar cities located within the same metropolitan area. Cities experiencing a growth in their liberal voter share have a lower new housing permit growth rate.

## **Sequential city growth: Empirical evidence**

- Journal of Urban Economics---2011---David Cuberes

Using two comprehensive datasets on populations of cities and metropolitan areas for a large set of countries, I present three new empirical facts about the evolution of city growth. First, the distribution of cities' growth rates is skewed to the right in most countries and decades. Second, within a country, the average rank of each decade's fastest-growing cities tends to rise over time. Finally, this rank increases faster in periods of rapid growth in urban population. These facts can be interpreted as evidence in favor of the hypothesis that historically, urban agglomerations have followed a sequential growth pattern: Within a country, the initially largest city is the first to grow rapidly for some years. At some point, the growth rate of this city slows down and the second-largest city then becomes the fastest-growing one. Eventually, the third-largest city starts growing fast as the two largest cities slow down, and so on.

## **A new economic geography model of central places**

- Journal of Urban Economics---2011---Takatoshi Tabuchi,Jacques Thisse



One of the most striking feature of the space-economy is that cities form a hierarchical system exhibiting some regularity in terms of their size and the array of goods they supply. In order to show how such a hierarchical system may emerge, we consider a model with monopolistically competitive markets for the industrial sectors. As transport costs steadily decrease from large values, the urban system formed by several small cities entails structural changes in that some cities expand at the expense of the others by attracting a growing number of industries. Beyond some threshold, some cities disappear from the space-economy. Such an evolution of the urban system describes fairly well what has been observed in various historical periods that have experienced major changes in transportation technologies and/or political unification.

### **Spatial panel methods with applications to House Prices: A symposium**

- Journal of Urban Economics---2011---Dan Black, Stuart Rosenthal

2011

### **The spatial and temporal diffusion of house prices in the UK**

- Journal of Urban Economics---2011---Sean Holly, M Pesaran, Takashi Yamagata

This paper provides a method for the analysis of the spatial and temporal diffusion of shocks in a dynamic system. We use changes in real house prices within the UK economy at the level of regions to illustrate its use. Adjustment to shocks involves both a region specific and a spatial effect. Shocks to a dominant region - London - are propagated contemporaneously and spatially to other regions. They in turn impact on other regions with a delay. We allow for lagged effects to echo back to the dominant region. London in turn is influenced by international developments through its link to New York and other financial centers. It is shown that New York house prices have a direct effect on London house prices. We analyse the effect of shocks using generalised spatio-temporal impulse

responses. These highlight the diffusion of shocks both over time (as with the conventional impulse responses) and over space.

### **Maximum likelihood estimation and Lagrange multiplier tests for panel seemingly unrelated regressions with spatial lag and spatial errors: An application to hedonic housing prices in Paris**

- Journal of Urban Economics---2011---Badi Baltagi, Georges Bresson

This paper proposes maximum likelihood estimators for panel seemingly unrelated regressions with both spatial lag and spatial error components. We study the general case where spatial effects are incorporated via spatial errors terms and via a spatial lag dependent variable and where the heterogeneity in the panel is incorporated via an error component specification. We generalize the approach of Wang and Kockelman (2007) and propose joint and conditional Lagrange multiplier tests for spatial autocorrelation and random effects for this spatial SUR panel model. The small sample performance of the proposed estimators and tests are examined using Monte Carlo experiments. An empirical application to hedonic housing prices in Paris illustrate these methods. The proposed specification uses a system of three SUR equations corresponding to three types of flats within 80 districts of Paris over the period 1990-2003. We test for spatial effects and heterogeneity and find reasonable estimates of the shadow prices for housing characteristics.

### **Brain drain or brain bank? The impact of skilled emigration on poor-country innovation**

- Journal of Urban Economics---2011---Ajay Agrawal, Devesh Kapur, John McHale, Alexander Oettl

The development prospects of a poor country or region depend in part on its capacity for innovation. In turn, the productivity of its innovators, whom are often concentrated around urban centers, depends on their access to technological knowledge. The emigration of

highly skilled individuals weakens local knowledge networks (brain drain) but may also help remaining innovators access valuable knowledge accumulated abroad (brain bank). We develop a model in which the size of the optimal innovator Diaspora depends on the competing strengths of co-location and Diaspora effects for accessing knowledge. Then, using patent citation data associated with inventions from India, we estimate the key co-location and Diaspora parameters. The net effect of innovator emigration is to harm domestic knowledge access, on average. However, knowledge access conferred by the Diaspora is particularly valuable in the production of India's most important inventions as measured by citations received. Thus, our findings imply that the optimal emigration level may depend, at least partly, on the relative value resulting from the most cited compared to average inventions.

### **Is the division of labour limited by the extent of the market? Evidence from French cities**

- Journal of Urban Economics---2011---Gilles Duranton, Hubert Jayet

This paper provides supportive evidence to the notion that the division of labour is limited by the extent of the (local) market. We first propose a theoretical model. Its main prediction is that scarce specialists occupations are over-represented in large cities. Using census data for French cities, we find strong empirical support for this prediction.

### **The holdout problem and urban sprawl: Experimental evidence**

- Journal of Urban Economics---2011---John Cadi- gan, Pamela Schmitt, Robert Shupp, Kurtis Swope

Conventional wisdom as well as economic theory suggests it is more costly to reassemble fragmented land due to transactions costs and strategic bargaining costs. Both costs are expected to increase with the number of sellers. Inefficient allocation of land resources may result including property entropy (Parisi, 2002), urban sprawl (Miceli and Sirmans, 2007) and deteriorating inner cities. Given the difficulty of observing actual

values attached by buyers and sellers to land, little empirical evidence exists to support the conventional wisdom and theoretical work. We use experimental methods to examine transactions costs and strategic bargaining costs in a land-assembly market game with one buyer, 1-4 sellers, and complementary exchanges. The buyer's final earnings vary inversely with the number of sellers, *ceteris paribus*, indicating an incentive to purchase consolidated land. Delay costs reduce hold-out, but result in lower payoffs for both buyers and sellers. Competition between sellers reduces holdout and the buyer's total purchase price.

### **Assessing inherent model bias: An application to native displacement in response to immigration**

- Journal of Urban Economics---2011---Giovanni Peri, Chad Sparber

There is a long-standing debate among academics about the effect of immigration on native internal migration decisions. If immigrants displace natives this may indicate a direct cost of immigration in the form of decreased employment opportunity for native workers. Moreover, displacement would also imply that cross-region analyses of wage effects systematically underestimate the consequences of immigration. The widespread use of such area studies for the US and other countries makes it especially important to know whether a native internal response to immigration truly occurs. This paper introduces a microsimulation methodology to test for inherent bias in regression models that have been used in the literature. We show that some specifications have built biases into their models, thereby casting doubt on the validity of their results. We then provide a brief empirical analysis with a panel of observed US state-by-skill data. Together, our evidence argues against the existence of native displacement. This implies that cross-region analyses of immigration's effect on wages are still informative.

### **Directional imbalance in transport prices and economic geography**

- Journal of Urban Economics---2011---Takaaki Takahashi

This paper examines how and why transport prices become imbalanced with respect to the direction of shipments and how this affects economic geography. It is shown that the equilibrium transport price of the shipment in a particular direction is a nondecreasing function of the relative size of the embarkation region. Furthermore, we show that the directional imbalance in transport prices increases the likelihood of the symmetric pattern being stable and decreases the likelihood of the core-periphery patterns being sustainable. In short, the imbalance acts as a dispersion force.

### **State minimum wages and business location: Evidence from a refined border approach**

- Journal of Urban Economics---2011---Shawn Rohlin

This study examines the effect of state minimum wage changes on new and existing business establishments. It employs a refined border approach in conjunction with other differencing methods to control for unobserved heterogeneous area characteristics. The findings suggest that state minimum wage increases deter new establishments from locating in an area, particularly in industries that rely on low-education workforces, such as the retail and manufacturing industries. However, existing establishments, regardless of industry type, are not found to be adversely affected by minimum wage policy.

### **Efficient agglomeration of spatial clubs**

- Journal of Urban Economics---2011---Oded Hochman

We investigate here the agglomeration of spatial clubs in an efficient allocation of a club economy. The literature on agglomeration has focused largely on a primary agglomeration caused by direct attraction forces. We concentrate mainly on secondary and tertiary agglomerations caused by a primary agglomeration. Initially, scale economies in the provision of club goods (CGs) lead each CG to agglomerate in facilities of its club. This primary agglomeration causes a secondary concentration of population around these facilities, which in

turn brings about a tertiary agglomeration of facilities of different clubs into centers in the midst of population concentration. The agglomeration of facilities occurs only if a secondary concentration of population takes place. We analyze in detail two specific patterns of agglomeration. One is the central location pattern in which the facilities of all clubs agglomerate perfectly in the middle of the complex. The second is a triple-centered complex in which the center in the middle of the complex consists of perfectly agglomerated facilities of different clubs, each with a single facility per complex. The remaining two centers also consist of facilities of different clubs, but clubs in these centers each have two facilities per complex, one in each center. Each of these two centers is located between a boundary and the middle of the complex closer to the middle of the complex than to the boundary. The facilities in these two centers form condensed clusters of facilities that may contain residential land in between the facilities. We then show that these agglomeration patterns also characterize agglomerations in general. The literature maintains that an efficiently behaving municipality increases its tax-base. This implies that it is in the municipality's interest to achieve efficiency. The best way for a local government to achieve this desired efficiency is by partially intervening in market operations in order to internalize local externalities. Such an intervention should be limited to providing the city's infrastructure, to taxing only residential land rents and clubs' profits, to subsidizing the basic industry of the city, and to partially regulating land uses. Consequently, if the local governments of all complexes behave according to the above, the decentralization of the efficient allocation of the club economy would be attained.

### **Competition in law enforcement and capital allocation**

- Journal of Urban Economics---2011---Nicolas Marceau,Steeve Mongrain

This paper studies inter-jurisdictional competition in the fight against crime and its impact on occupational choice and the allocation of capital. In a world where

capital is mobile, jurisdictions are inhabited by individuals who choose to become either workers or criminals. Because the return of the two occupations depends on capital, and because investment in capital in a jurisdiction depends on its crime rate, there is a bi-directional relationship between capital investment and crime which may lead to capital concentration. By investing in costly law enforcement, a jurisdiction makes the choice of becoming a criminal less attractive, which in turn reduces the number of criminals and makes its territory more secure. This increased security increases the attractiveness of the jurisdiction for investors and this can eventually translate into more capital being invested. We characterize the Nash equilibria--some entailing a symmetric outcome, others an asymmetric one--and study their efficiency.

**The political economy of regional integration projects at borders where poor and rich meet:  
The role of cross-border shopping and community sorting**

- Journal of Urban Economics---2011---Kristof Dascher,Alexander Haupt

At borders between poor and rich countries, huge service price differentials could be exploited to mutual benefit, offering better-paid job opportunities to the poor as well as better shopping opportunities to the rich. However, cross-border shopping is often limited by the substantial transaction costs of crossing the border. Moreover, countries and regions frequently fail to cut these transaction costs even when they have the opportunity to do so. We provide a politico-economic analysis of cross-border integration projects. More specifically, we show how the political outcome depends on (i) intra-country mobility, (ii) decision making and housing ownership regimes, and (iii) federal grants and international border regulations. Our analysis builds on two key characteristics in which individuals differ: interregional mobility and intercultural ability.

**Homicide in black and white**

- Journal of Urban Economics---2010---O'Flaherty, Brendan,Rajiv Sethi

African-Americans are six times as likely as white Americans to die at the hands of a murderer, and roughly seven times as likely to murder someone. Young black men are 15 times as likely to be murdered as young white men. This disparity is historic and pervasive, and cannot be accounted for by individual characteristics. Culture-of-violence and tail-of-the-distribution theories are also inadequate to explain the geographic and demographic pattern of the disparity. We argue that any satisfactory explanation must take into account the fact that murder can have a preemptive motive: people sometimes kill simply to avoid being killed. As a result, disputes can escalate dramatically in environments (endogenously) perceived to be dangerous, resulting in self-fulfilling expectations of violence for particular dyadic interactions, and significant racial disparities in rates of murder and victimization. Because of strategic complementarity, small differences in fundamentals can cause large differences in murder rates. Differences in the manner in which the criminal justice system treats murders with victims from different groups, and differences across groups in involvement in street vice, may be sufficient to explain the size and pattern of the racial disparity.

**Thieves, thugs, and neighborhood poverty**

- Journal of Urban Economics---2010---David Bjerk

This paper develops a model of crime analyzing how such behavior is associated with individual and neighborhood poverty. The model shows that even under relatively minimal assumptions, a connection between individual poverty and both property and violent crimes will arise, and moreover, "neighborhood" effects can develop, but will differ substantially in nature across crime types. A key implication is that greater economic segregation in a city should have no effect or a negative effect on property crime, but a positive effect on violent crime. Using IV methods, I show this implication to be consistent with the empirical evidence.

## **Crime and urban flight revisited: The effect of the 1990s drop in crime on cities**

- Journal of Urban Economics---2010---Ingrid Gould Ellen,O'Regan, Katherine

The 'flight from blight' and related literatures on urban population changes and crime have primarily considered times of high or increasing crime rates. Perhaps the most cited recent work in this area, Cullen and Levitt (1999), does not extend through 1990s, a decade during which crime rates declined almost continuously, to levels that were lower than experienced in decades. This paper examines whether such declines contributed to city population growth and retention (abated flight). Through a series of population growth models that attempt to identify causality through several strategies (including instrumental variables) we find at best weak evidence that overall city growth is affected by changes in crime. We find no evidence that growth is differentially sensitive to reductions in crime, as compared to increases. Focusing more narrowly on within MSA migration, residential decisions that are more likely to be sensitive to local conditions, we do find evidence supporting abatement of 'flight' - that is, lower levels of crime in central cities in the 1990s are associated with lower levels of migration to the suburbs. This greater ability to retain residents already in the city does not appear to be accompanied by a greater ability to attract new households from the suburbs, or from outside of the metropolitan area.

## **The stability of downtown parking and traffic congestion**

- Journal of Urban Economics---2010---Richard Arnott,Eren Inci

Consider a transport facility in steady state that is operating at maximum throughput. How does it respond to a once-and-for-all increase in demand? The trip price must increase to ration the increased demand, but how? These questions have been the subject of a debate in transport economic theory dating back to Walters' classic paper (1961). The current wisdom

is that the facility continues to operate at full capacity, with travel at reduced velocity and/or increased queuing serving to increase the trip price. This paper analyzes the transient dynamics and stability of steady states for a spatially uniform road network with on-street parking, and finds in this context that the increase in demand may cause operation at reduced throughput.

## **Is urban decay bad? Is urban revitalization bad too?**

- Journal of Urban Economics---2010---Jacob Vigdor

Neighborhood revitalization could, in theory, harm some existing residents if it leads to price increases that exceed their willingness-to-pay. I use data from the American Housing Survey to estimate a discrete choice model identifying households' willingness-to-pay for neighborhood quality. These willingness-to-pay estimates are then compared to the actual price changes that accompany observed changes in neighborhood quality. The results suggest that price increases associated with revitalization are smaller than most households' willingness to pay for neighborhood improvements. Conversely, declines in neighborhood quality are generally not accompanied by rent declines sufficient to compensate the typical resident. For the majority of the population, then, neighborhood revitalization is beneficial and decline detrimental.

## **Why does entry cluster geographically? Evidence from the US tire industry**

- Journal of Urban Economics---2010---Guido Buentorf,Steven Klepper

We trace the geographic and intellectual heritage of the early entrants into the US tire industry in Ohio, the industry's historical center. We test a model in which the supply of capable entrants, localized knowledge, and production externalities influence where entrants originated and located. Entry clustered around existing tire producers and in more populated regions, which we attribute mainly to the supply of capable entrants.

Production externalities influenced the profitability of operating in a region, but their effect was limited by the localized knowledge of entrants. Entry fueled agglomeration mainly through an endogenous process governing the supply of capable entrants.

### **The location of domestic and foreign production affiliates by French multinational firms**

- Journal of Urban Economics---2010---Thierry Mayer, Isabelle Mejean, B. Nefussi

In this paper we combine two traditions in the analysis of firms' location patterns. One led by trade economists who try to understand why do firms invest abroad, and another one led by urban/regional economists, who frequently use patterns of inter-regional or inter-city choices to estimate agglomeration economies. We contribute to the trade-motivated set of papers on location choices by adding the domestic country in the choice set, while accounting for firm's heterogeneity in the choices. Our econometric results using French firm-level data show an important "home bias" in manufacturing investment decisions. A crucial finding, which bridges with our contribution to the agglomeration literature, is that the spatial clustering of affiliates belonging to the same industrial group accounts for the lion's share of this home bias.

### **The size distribution across all cities - Double Pareto lognormal strikes**

- Journal of Urban Economics---2010---Kristian Giesen, Arndt Zimmermann, Jens Suedekum

Using un-truncated settlement size data from eight countries, we show that the "double Pareto lognormal" (DPLN) distribution provides a better fit to actual city sizes than the simple lognormal (LN) distribution. The DPLN has a lognormal body and features a power law in both the lower and the upper tail. It emerges in the steady-state of a stochastic urban growth process with random city formation. Our findings reconcile a recent debate on the Zipfian rank-size rule for city sizes.

### **Local response to fiscal incentives in heterogeneous communities**

- Journal of Urban Economics---2010---Jonah E. Rockoff

I examine the impact of a property tax-relief program in New York State that lowered the marginal cost of school expenditure to homeowners. I find that a typical school district, which received 20% of its revenue through the program in the school year 2001-2002, raised expenditure by 4.1% and local property taxes by 6.8% in response to the program. I then examine how the preferences of various groups of local taxpayers affect educational spending by identifying systematic variation across districts in the response to fiscal incentives. These results support the hypothesis that homeowners are more influential on local expenditure decisions than renters, owners of second homes, or owners of non-residential property.

### **The impact of public library use on reading, television, and academic outcomes**

- Journal of Urban Economics---2010---Rachana Bhatt

Do individuals engage in beneficial activities, like recreational reading, if the necessary materials are easily accessible and relatively inexpensive? I investigate this issue by estimating how much reading time increases as a result of public library use. To address the endogeneity of library use I use an IV approach where the instrument is a household's distance to their closest public library. Using data from the Current Population Survey, American Time Use Survey, and National Household Education Survey, I find that library use increases the amount of time an individual spends reading by approximately 27 min on an average day. Moreover, it increases the amount of time parents spend reading to/with young children by 14 min. This increase in reading is more than offset by a 59 min decrease in time spent watching television, and there is no significant change in time spent on other activities. For children in school, library use positively impacts

homework completion rates. A simple cost-benefit exercise highlights the potential application of these results for local governments who fund these libraries.

### **How should passenger travel in Mexico City be priced?**

- Journal of Urban Economics---2010---Ian Parry, Govinda Timilsina

This paper uses an analytical-simulation model to examine the optimal pricing of the passenger transportation system in Mexico City. The model incorporates travel by auto, microbus, public bus, and rail, as well as externalities from local and global air pollution, traffic congestion, and road accidents. In our benchmark case, the optimal gasoline tax is \$2.72 per gallon, or 16 times the current tax. However, a per mile toll would reduce traffic congestion, the largest externality, more directly, and we put the optimized auto toll at 20.3 cents per mile. Tolls on minibuses also improve efficiency, though the gains are on a smaller scale, as are those from reforming public transit fares.

### **Pollution abatement and environmental equity: A dynamic study**

- Journal of Urban Economics---2010---Nadezhda Baryshnikova

We study pollution abatement and environmental equity in a dynamic panel model using data for 234 plants in the US pulp and paper industry observed over the period 1985-1997. We suggest a theoretical model for the plant manager who incorporates regulatory pressure into his calculations of optimal amounts of pollution. Assuming actual pollution abatement exhibits a sluggish adjustment process, the theoretical model leads to an empirical AR(1) panel model. We estimate our model using GMM with both "temporally lagged" and "spatially lagged" instruments and find significant evidence supporting the partial adjustment model for both particulate matters less than 10 [ $\mu$ ]m and sulfur dioxide. We find some environmental inequity with respect to the children (under 6 years) and adults with no high school diploma. Our findings show no evidence

of environmental inequity against African-Americans, Hispanics, other minority races, or the poor.

### **Local social capital and geographical mobility**

- Journal of Urban Economics---2010---Quentin David, Alexandre Janiak, Etienne Wasmer

In the North of Europe, club membership is higher than in the South, but the frequency of contacts with friends, relatives and neighbors is lower. We link this fact to another one: the low geographical mobility rates in the South of Europe relative to the North. To interpret these facts, we build a model of local social capital and mobility. Investing in local ties is rational when workers do not expect to move to another region. We find that observationally close individuals may take different paths characterized by high local social capital, low mobility and high unemployment, vs. low social capital, high propensity to move and higher employment probability. Employment protection reinforces the accumulation of local social capital and thus reduces mobility. European data supports the theory: within a country and at the individual level, more social capital is associated with lower mobility.

### **Gross versus net equalization scheme in a federation with decentralized leadership**

- Journal of Urban Economics---2010---Marie-Laure Breuillé, Thierry Madiès, Emmanuelle Taugourdeau

This paper compares the impact of two equalization transfer schemes on regional budgetary choices: a gross equalization scheme, where ex-post transfers to regions are financed from federal tax revenues, and a net equalization scheme, where region-to-region ex-post transfers allocated by the federal government are self-financed. The net equalization scheme reduces ex-post federal intervention and should therefore be favored over the gross equalization scheme in order to reduce opportunistic regional behaviour. In addition, the two equalization schemes differently affect the composition of public expenditures. The gross equalization scheme

generates an upward distortion of the amount of capital public expenditures whereas the net equalization scheme generates a downward distortion of the amount of current public expenditures compared to the optimum. A welfare analysis reveals that incentives to use a net equalization scheme are strengthened for a sufficiently high number of regions.

### **Do enterprise zones create jobs? Evidence from California's enterprise zone program**

- Journal of Urban Economics---2010---David Neumark, Jed Kolko

We use new establishment-level data and geographic mapping methods to improve upon evaluations of the effectiveness of state enterprise zones, focusing on California's program. Because zone boundaries do not follow census tracts or zip codes, we created digitized maps of original zone boundaries and later expansions. We combine these maps with geocoded observations on most businesses located in California. The evidence indicates that enterprise zones do not increase employment. We also find no shift of employment toward the lower-wage workers targeted by enterprise zone incentives. We conclude that the program is ineffective in achieving its primary goals.

### **Ability sorting and consumer city**

- Journal of Urban Economics---2010---Sanghoon Lee

This paper provides a consumption-side explanation for the urban wage premium. The paper shows that if the taste for consumption variety is a luxury good, high average wages in large cities can be due to the selection of high-skill workers choosing to live there. A unique implication is that urban wage premiums are decreasing in skills and can even be negative for very high-skill workers. I confirm this implication using data on the health care workers.

### **Housing busts and household mobility**

- Journal of Urban Economics---2010---Fernando Ferreira, Joseph Gyourko, Joseph Tracy

Using two decades of American Housing Survey data from 1985 to 2007, we revisit the literature on lock-in effects and provide new estimates of the impacts of negative equity and rising interest rates on the mobility of owners. Both lead to substantially lower mobility rates. Owners suffering from negative equity are one-third less mobile, and every added \$1000 in real annual mortgage costs lowers mobility by about 12%. Our results cannot simply be extrapolated to the future, but they do have potentially important implications for policy makers concerned about the consequences of the housing bust that began as our data series ended. In particular, they indicate that we need to begin considering the consequences of lock-in and reduced household mobility because they are quite different from those associated with default and higher mobility.

### **Revenue recycling within transport networks**

- Journal of Urban Economics---2010---Yukihiro Kidokoro

In this paper, we analyse second-best pricing and investment policy for transport networks with a revenue recycling mechanism in which the toll revenue is used for transport investments or subsidies, as in London's congestion-charging scheme. The results of this paper demonstrate that the way toll revenue is used modifies the usual results significantly, which are typically based on assuming a lump-sum transfer. First, recycling revenue as investment increases the second-best toll when the benefits from the investment exceed the costs and when demand is inelastic with respect to the toll. Recycling revenue as a subsidy has no such effect. Second, "partial" cost-benefit analysis that focuses only on the targeted transport mode would usually lead to erroneous conclusions about whether toll revenues should be used for transport investment, subsidies, or general tax revenues. Thus, "full" cost-benefit analysis, which accounts for changes in consumer and producer surpluses in all transport modes, is necessary.



## House prices, development costs, and the value of waiting

- Journal of Urban Economics---2010---Graeme Guthrie

This paper demonstrates that new house prices can exceed direct development costs by considerable margins in competitive housing markets with finite price-elasticities of demand and no restrictive land-use regulation. The premium reflects the value of the option to delay developing the marginal piece of undeveloped land. Competition amongst landowners reduces the option value relative to the standard open-city framework, but--as long as undeveloped land is heterogeneous--does not reduce it to zero. Calibrating a special case of the model to US data suggests that the premium is economically significant. In addition to proving that prices can exceed costs without regulation, this paper shows that the relationship between volatility and the rate of investment is more complicated than previously thought.

## Why buy what you can get for free? The effect of foreign direct investment on state patent rates

- Journal of Urban Economics---2010---Timothy Ford,Jonathan Rork

Research has shown that foreign direct investment (FDI) encourages economic growth at the state level. We also know that knowledge spillovers, measured via patent counts, contribute to economic growth. Using an instrumental variable approach, this paper demonstrates that FDI increases patent rates in US states, thereby providing a link for the mechanism through which FDI impacts growth. Moreover, we find that FDI in neighboring states has just as strong an impact on patent rates, giving further credence to the notion that knowledge can spill across state borders.

## Labour supply and commuting

- Journal of Urban Economics---2010---Eva Gutiérrez-i-Puigarnau,Jos van Ommeren

We examine the effect of commuting distance on workers' labour supply patterns, distinguishing between weekly labour supply, number of workdays per week and daily labour supply. We account for endogeneity of distance by using employer-induced changes in distance. In Germany, distance has a slight positive effect on daily and weekly labour supply, but no effect on the number of workdays. The effect of distance on labour supply patterns is stronger for female workers, but it is still small.

## The proximity-concentration trade-off with profit shifting

- Journal of Urban Economics---2010---Oscar Amerighi,Susana Peralta

We study a firm which serves two unequally-sized jurisdictions and must choose where to locate its first production plant, and whether to open a second plant to serve the other market through local sales rather than exports. An exporter pays taxes only to the region where it locates its single production plant. A double-plant multi-regional firm pays taxes in both regions, but may shift taxable profits across them, at a cost. We show that the standard trade-off between fixed and trade costs is modified, depending on both the average tax of, and the tax difference between, the two regions. We also find that increased market size asymmetry may make it more likely that the firm builds a second production plant. From a total-welfare viewpoint, it is always desirable to control the firm's tax avoidance ability when the double-plant structure is given. However, the fact that the firm may react to corporate taxation by changing its production structure may be a reason not to curb profit-shifting activities.

## What are the social benefits of homeownership? Experimental evidence for low-income households

- Journal of Urban Economics---2010---Gary V. Engelhardt,Michael Eriksen,William Gale,Gregory B. Mills

We estimate the social benefits of homeownership using

an exogenous instrument based on randomly assigned treatment status from a field experiment that subsidized saving for home purchase for low-income renters through Individual Development Accounts (IDAs). This approach attempts to eliminate the potential correlation present in previous analyses between unobserved individual characteristics leading to homeownership and traits leading to provision of social capital or local amenities. Consistent with previous work, we show that homeownership positively affects political engagement in simple probits. Instrumental variable probits, however, show no impact of homeownership on political involvement. IV results for other social outcomes are less conclusive. The analysis suggests that with the use of an exogenous instrument, it is possible to generate results that are different from the previous literature. Our results also suggest that being eligible to open an IDA did not spur households to provide more social capital or local amenities.

### Overlapping soft budget constraints

- Journal of Urban Economics---2010---Marie-Laure Breuillé,Marianne Vigneault

Our paper identifies a potential problem with decentralization at a time when its virtues are widely extolled. We show that responsibility for equalization at multi-levels within a decentralized federation creates an overlapping equalization policy that can worsen fiscal discipline. Contrary to Qian and Roland (1998), we also show in our set-up that fiscal competition among regional rescuers does not act as a commitment device to harden the local budget constraint.

### The racial geography of street vice

- Journal of Urban Economics---2010---O'Flaherty, Brendan,Rajiv Sethi

Street vice (anonymous prostitution, gambling, and the sale of illicit drugs) is spatially concentrated and confined largely to Black neighborhoods in central cities, even though demand is quite evenly distributed throughout the general population. We show how this

pattern can arise through the interacting location decisions of sellers, buyers, and non-user households. Areas with high demand density (cities) have lower prices and more tightly packed sellers in equilibrium relative to areas with lower demand density (suburbs) under autarky. When trade between city and suburb is possible, competitive pressure from the city lowers suburban prices and seller density. Higher income households distance themselves from street vice, causing the exposed population to become poorer and disproportionately Black. Even mild preferences over neighborhood racial composition can then induce lower income Whites to exit, resulting in racial segregation. The relationship between segregation and exposure to vice can be non-monotonic and discontinuous: decreased segregation implies greater sorting by income, and hence larger wage disparities between city and suburb. If such disparities get too large, all sales can shift discontinuously to the city and result in higher overall Black exposure even though more Blacks now reside in the suburbs.

### Dots to boxes: Do the size and shape of spatial units jeopardize economic geography estimations?

- Journal of Urban Economics---2010---A. Briant,Pierre-Philippe Combes,Miren Lafourcade

This paper evaluates, in the context of economic geography estimates, the magnitude of the distortions arising from the choice of a specific zoning system, which is also known as the Modifiable Areal Unit Problem (MAUP). We undertake three standard economic geography exercises (the analysis of spatial concentration, agglomeration economies, and trade determinants), using various French zoning systems differentiated according to the size and shape of their spatial units. While size might matter, especially when the dependent variable of a regression is not aggregated in the same way as the explanatory variables and/or the zoning system involves large spatial units, shape does so much less. In any case, both dimensions are of secondary importance compared to specification issues.

## Age of entry and the high school performance of immigrant youth

- Journal of Urban Economics---2010---Leanna Stiefel,Amy Schwartz,Dylan Conger

In 2005, immigrants exceeded 12% of the US population, with the highest concentrations in large metropolitan areas. While considerable research has focused on how immigrants affect local wages and housing prices, less research has asked how immigrants fare in US urban public schools. Previous studies find that foreign-born students outperform native-born students in their elementary and middle school years, but urban policymakers and practitioners continue to raise concerns about educational outcomes of immigrants arriving in their high school years. We use data on a large cohort of New York City (NYC) public high school students to examine how the performance of students who immigrate during high school (teen immigrants) differs from that of students who immigrate during middle school (tween immigrants) or elementary school (child immigrants), relative to otherwise similar native-born students. Contrary to prior studies, our difference-in-difference estimates suggest that, *ceteris paribus*, teen immigrants do well compared to native-born migrants, and that the foreign-born advantage is relatively large among the teen (im)migrants. That said, our findings provide cause for concern about the performance of limited English proficient students, blacks and Hispanics and, importantly, teen migrants. In particular, switching school districts in the high school years - that is, student mobility across school districts - may be more detrimental than immigration *per se*. Results are robust to alternative specifications and cohorts, including a cohort of Miami students.

## Manipulable congestion tolls

- Journal of Urban Economics---2010---Jan Brueckner,Erik Verhoef

The recent literature on congestion pricing with large agents contains a remarkable inconsistency: though agents are large enough to recognize self-imposed congestion and exert market power over prices, they do not

take into account the impact of their own actions on the magnitude of congestion tolls. When large agents are confronted with tolls derived under this parametric assumption but understand the rule used to generate them, the toll system will no longer guide the market to the social optimum. To address this problem, the present paper derives alternate, manipulable toll rules, which are designed to achieve the social optimum when agents anticipate the full impact of their actions on toll liabilities.

## A new approach to computing hedonic equilibria and investigating the properties of locational sorting models

- Journal of Urban Economics---2010---Nicolai Kuminoff,Abdul Salam Jarrah

This paper outlines a new way to solve the traditional housing market assignment problem and uses it to investigate the properties of hedonic equilibria. Our approach to computing equilibria is based on Rosen's (1974) bid function. It has four desirable features: (i) convergence implies a hedonic equilibrium; (ii) convergence is guaranteed if a hedonic equilibrium exists; (iii) it can solve for a new equilibrium following a shock to the market; and (iv) if multiple equilibria exist, it can identify them. The algorithm is applied to micro data from San Joaquin County, California, where the choice of a home provides access to public schools in particular school districts. First we calibrate the algorithm to approximately reproduce actual housing prices in San Joaquin County as a hedonic equilibrium. Then we introduce a policy that improves school quality in selected school districts. We find that there are several possibilities for the new equilibrium. For each of these potential equilibria, we compare the marginal willingness to pay for school quality with the rate at which the improvement is capitalized into property values. The resulting capitalization rates differ substantially from marginal willingness to pay.

## **Is housing the business cycle? Evidence from US cities**

- Journal of Urban Economics---2010---Andra Ghent,Michael Owyang

In a recent paper, Leamer (2007) identified housing as an important precursor of the national business cycle. Previous work, on the other hand, has shown that regional cycles may not be synchronous with the aggregate cycle. In this paper, we analyze the relationship between housing and the business cycle at the MSA-level for a set of 51 US cities. We find that declines in house prices are often not followed by declines in that city's employment. While the growth rates in housing variables appeared to slow ahead of city-level peaks, we find no consistent statistical relationship suggesting a city's permits or prices influences its business cycle. In fact, we find that national permits are a better leading indicator for a city's employment than a city's own permits. This suggest the possibility that housing is merely a proxy for other consumption or wealth indicators.

## **Globalization, interregional and international inequalities**

- Journal of Urban Economics---2010---Dao-Zhi Zeng,Laixun Zhao

This paper examines the impact of globalization on interregional and international inequalities in a setup of two countries and four regions, under international mobility of capital. In contrast to the literature, countries and regions are not required to be symmetric. We find that the aforementioned inequalities are closely related to the country size, region size, the degree of globalization (e.g., capital mobility and trade costs) and the level of local infrastructure. In particular, international trade behaves as a dispersion force when capital is internationally mobile for small countries such that reducing domestic transport costs lowers its interregional inequality, but the opposite can be true for large countries or when capital is internationally immobile.

## **Hedonic pricing with redevelopment options: A new approach to estimating depreciation effects**

- Journal of Urban Economics---2010---John Clapp,Katsiaryna Salavei

The standard hedonic model of durable assets is a special case of a more general model that contains two additive terms: (1) use value of the existing hedonic vector and (2) the value of the option to reconfigure hedonic characteristics. One empirical implication is that the two parts of value are related: e.g., use value increases with interior area whereas option value decreases with "intensity," the ratio of structure value divided by land value. Increases in building age reduce use value but increase option value. Data from Greenwich Connecticut indicate that intensity has the expected negative effect. Coefficients on building age are shown to be better measures of depreciation when intensity variables are included in the regression.

## **The academic impact of multi-track year-round school calendars: A response to school overcrowding**

- Journal of Urban Economics---2010---Jennifer Graves

Using detailed longitudinal data for the state of California, this paper studies the effect of multi-track year-round school calendars on academic performance. This particular type of year-round calendar allows for schools to house more students within the same facility than other calendars and is often motivated by its potential to alleviate overcrowding as well as to save costs relative to new school construction. This paper finds that these financial savings "come at a cost" in terms of the quality of education produced, as measured by a school's national percentile rank on standardized tests. Being on a multi-track year-round calendar results in a drop of 1-2 percentile points relative to a traditional calendar in national rank on reading, math and language scores. The policy implications are especially relevant to the current condition of the US education system, where many states are facing overcrowding problems

and have implemented or are seriously considering implementation of multi-track year-round calendars as a remedy.

### **Car ownership and the labor market of ethnic minorities**

- Journal of Urban Economics---2010---Pieter Gautier,Yves Zenou

We show how initial wealth differences between low-skilled minorities and white workers can generate differences in their labor-market outcomes. This even occurs in the absence of a taste for discrimination against ethnic minorities or exogenous differences in distance to jobs. Because of the initial wealth difference, minorities cannot afford to buy a car while whites can. Car ownership allows whites to reach more jobs per unit of time, which gives them a better bargaining position in the labor market. As a result, in equilibrium, ethnic minorities end up with both higher unemployment rates and lower wages than whites. Furthermore, we also show that it takes more time for minorities to reach their jobs even though they travel less miles when employed. Those predictions are consistent with the data. Better access to capital markets or better public transportation will reduce the differences in labor-market outcomes.

### **The greenness of cities: Carbon dioxide emissions and urban development**

- Journal of Urban Economics---2010---Edward L. Glaeser,Matthew Kahn

Carbon dioxide emissions may create significant social harm because of global warming, yet American urban development tends to be in low density areas with very hot summers. In this paper, we attempt to quantify the carbon dioxide emissions associated with new construction in different locations across the country. We look at emissions from driving, public transit, home heating, and household electricity usage. We find that the lowest emissions areas are generally in California and that the highest emissions areas are in

Texas and Oklahoma. There is a strong negative association between emissions and land use regulations. By restricting new development, the cleanest areas of the country would seem to be pushing new development towards places with higher emissions. Cities generally have significantly lower emissions than suburban areas, and the city-suburb gap is particularly large in older areas, like New York.

### **New housing supply and the dilution of social capital**

- Journal of Urban Economics---2010---Christian Hilber

This paper examines the role of local housing supply conditions for social capital investment. Using an instrumental variables approach and data from the Social Capital Community Benchmark Survey, it is documented that the positive link between homeownership and individual social capital investment is largely confined to more built-up neighborhoods (with more inelastic supply of new housing). The empirical findings provide support for the proposition that in these localities house price capitalization provides additional incentives for homeowners to invest in social capital. The findings are also largely consistent with the proposition that built-up neighborhoods provide protection from inflows of newcomers that could upset a mutually beneficial equilibrium involving reciprocal cooperation. However, the results do not appear to be driven by selection based on inherent differences in social aptitudes or by Tiebout sorting.

### **School board politics, school district size, and the bargaining power of teachers' unions**

- Journal of Urban Economics---2010---Heather Rose,Jon Sonstelie

This paper presents a public choice theory of the bargaining power of teachers' unions. The theory predicts that the power of the unions rises with the size of a district. The theory is tested by examining the relationship between district size and various bargaining

outcomes for a sample of 771 California school districts in 1999-2000. As hypothesized, teachers' salaries rise and the ratio of teachers per pupil falls with increasing district size. The paper also considers several alternative explanations for these results.

## **Can the land tax help curb urban sprawl?**

### **Evidence from growth patterns in Pennsylvania**

- Journal of Urban Economics---2010---Spencer Banzhaf,Nathan Lavery

Urban sprawl has become a policy concern of national prominence. One tool that has been suggested for combating sprawl is the land or split-rate tax. In theory, such taxes can raise the ratio of housing capital to land. This in turn can raise the density of housing units where it is applied, if the average size of housing units does not increase enough to offset an effect on the number of housing units. This research explores these issues, looking at a panel of land uses and demographics in Pennsylvania. We confirm the theoretical prediction that the split-rate tax raises the capital/land ratio. We also find that the primary effect is in more housing units, rather than bigger units, suggesting the split-rate tax is potentially a powerful anti-sprawl tool. We find adoption of the split-rate tax increases the number of housing units, and that these units follow a more dense pattern of development.

## **Who gentrifies low-income neighborhoods?**

- Journal of Urban Economics---2010---Terra McKinnish,Randall Walsh,T. Kirk White

This paper uses confidential Census data, specifically the 1990 and 2000 Census Long Form data, to study demographic processes in neighborhoods that gentrified during the 1990s. In contrast to previous studies, the analysis is conducted at the more refined census-tract level, with a narrower definition of gentrification and more closely matched comparison neighborhoods. Furthermore, our access to individual-level data with census tract identifiers allows us to separately identify recent in-migrants and long-term residents. Our results

indicate that, on average, the demographic flows associated with the gentrification of urban neighborhoods during the 1990s are not consistent with displacement and harm to minority households. In fact, taken as a whole, our results suggest that gentrification of predominantly black neighborhoods creates neighborhoods that are attractive to middle-class black households.

## **Property taxes and elderly mobility**

- Journal of Urban Economics---2010---Hui Shan

The 2000-2005 housing market boom in the U.S. has caused sharp increases in residential property taxes. Housing-rich but income-poor elderly homeowners often complain about rising tax burdens, and anecdotal evidence suggests that some move to reduce their tax burden. There has been little systematic analysis, however, of the link between property tax levels and the mobility rate of elderly homeowners. This paper investigates this link using household-level panel data from the Health and Retirement Study (HRS) and a newly collected data set on state-provided property tax relief programs. These relief programs generate variation in effective property tax burdens that is not due solely to arguably endogenous local community choices about taxes and expenditure programs. The findings provide evidence suggesting that higher property taxes raise mobility among elderly homeowners. The point estimates from instrumental variable estimation using relief programs to generate instruments suggest that a \$100 increase in annual property taxes is associated with a 0.73 percentage point increase in the 2-year mobility rate for homeowners over the age of 50. This is an 8 percent increase from the baseline 2-year mobility rate of 9 percent. These results are robust to alternative specifications.

## **Marriage and the city: Search frictions and sorting of singles**

- Journal of Urban Economics---2010---Pieter Gautier,Michael Svarer,C. N. Teulings

This paper develops and tests a model where cities play an important role as marriage markets. The idea is

simple. Cities are dense areas where singles can meet more potential partners than in rural areas. To enjoy those benefits, they are willing to pay a premium in terms of higher housing prices. Once married, the benefits from meeting more potential partners vanish and married couples move out of the city. Attractive singles benefit most from a dense market and are therefore more likely to move to the city. Those predictions are tested and confirmed with a unique Danish data set.

### **Interregional competition, spillovers and attachment in a federation**

- Journal of Urban Economics---2010---Emilson Silva,Chikara Yamaguchi

We examine decentralized environmental policy making in a federation characterized by decentralized leadership and imperfect labor mobility due to attachment to regions. Energy consumption generates positive consumption benefits, but energy supply generates federal air pollution. Regional authorities regulate energy supply by controlling supplies of pollution permits. Energy and pollution permits are traded in interregional markets. The center redistributes incomes after it observes regional supplies of pollution permits. Regions are populated by mobile and immobile households and profits are expatriated. We show that the subgame perfect equilibrium for the federal policy game played by regional and central authorities is socially optimal.

### **Home health care and the housing and living arrangements of the elderly**

- Journal of Urban Economics---2010---Gary V. Engelhardt,Nadia Greenhalgh-Stanley

Home health care is long-term care, primarily skilled nursing, delivered in a home setting. Its provision may increase the likelihood that the elderly, the vast majority of which are homeowners, can live independently and maintain their desired residential status even if in relatively poor health. We provide empirical evidence on the extent to which home health care benefits affect the housing and living arrangements of the elderly by examining plausibly exogenous changes in the supply

of long-term care insurance through the Medicare program that occurred in the late 1990s. Prior to 1997, Medicare reimbursed home health care agencies on a retrospective-cost basis. Then, starting in October, 1997, as a result of the Balanced Budget Act of 1997 (BBA97), Medicare switched to a system of prospective payments for home health care, which induced state-by-calendar-year variation in the supply of this type of insurance. We exploit this variation to econometrically identify the short-run impact on the housing and living arrangements of the elderly, using CPS data from 1995 to 2000 (before and after the law change). Our estimates indicate that living arrangements are quite responsive to home health care benefits for the widowed, but not for the married elderly. The estimated elasticity of shared living to benefits is -0.9 for the widowed. However, these benefits have little impact on homeownership, at least in the short run, which suggests that the moderately adverse health events toward which public home health care benefits are targeted are not those that drive housing mobility and tenure transitions at advanced ages.

### **Federalism and accountability with distorted election choices**

- Journal of Urban Economics---2010---Sebastian Kessing

Random factors such as bad weather or exogenous economic shocks affect the re-election of politicians and can reduce accountability. Such distorted election choices interact with the architecture of government. Contrasting centralized with decentralized political systems, this study shows that centralization is likely to result in higher accountability if election choices are subject to small random distortions. Furthermore, equity and efficiency arguments for uniform policies in centralized systems are derived as these are likely to result in the better overall performance of politicians and in more equal performance across regions.

### **Urban economics and entrepreneurship**

- Journal of Urban Economics---2010---Edward L. Glaeser,Stuart Rosenthal,William Strange

Research on entrepreneurship often examines the local dimensions of new business formation. The local environment influences the choices of entrepreneurs; entrepreneurial success influences the local economy. Yet modern urban economics has paid relatively little attention to entrepreneurs. This essay introduces a special issue of *Journal of Urban Economics* dedicated to the geography of entrepreneurship. The paper frames the core questions facing researchers interested in assessing the local causes and consequences of entrepreneurship, perturbs a core urban model to incorporate entrepreneurship, and concludes by offering an agenda for future work on the spatial aspects of entrepreneurship.

### **The origin and growth of industry clusters: The making of Silicon Valley and Detroit**

- *Journal of Urban Economics*---2010---Steven Klepper

Data for all producers of automobiles and integrated circuits on their origins, base location, and performance are used to analyze the factors behind the historical clustering of the two industries in Detroit and Silicon Valley, respectively. Key ideas concerning organizational reproduction and heredity are elaborated and used to explain how spinoffs from incumbent firms in the same industry can lead to clustering. Findings concerning the spawning of spinoffs, entry by firms in related industries, and firm performance suggest that organizational reproduction and heredity were the primary forces underlying the clustering of the two industries.

### **The migration of technical workers**

- *Journal of Urban Economics*---2010---Michael Dahl,Olav Sorenson

Using panel data on the Danish population, we estimated the revealed preferences of scientists and engineers for the places in which they choose to work. Our results indicate that these technical workers exhibit substantial sensitivity to differences in wages but that they have even stronger preferences for living close to

family and friends. The magnitude of these preferences, moreover, suggests that the greater geographic mobility of scientists and engineers, relative to the population as a whole, stems from more pronounced variation across regions in the wages that they can expect. These results remain robust to estimation on a sample of individuals who must select new places of work for reasons unrelated to their preferences--those who had been employed at establishments that discontinued operations.

### **Breakthrough inventions and migrating clusters of innovation**

- *Journal of Urban Economics*---2010---William Kerr

We investigate the speed at which clusters of invention for a technology migrate spatially following breakthrough inventions. We identify breakthrough inventions as the top 1% of US inventions for a technology during 1975-1984 in terms of subsequent citations. Patenting growth is significantly higher in cities and technologies where breakthrough inventions occur after 1984 relative to peer locations that do not experience breakthrough inventions. This growth differential in turn depends on the mobility of the technology's labor force, which we model through the extent that technologies depend upon immigrant scientists and engineers. Spatial adjustments are faster for technologies that depend heavily on immigrant inventors. The results qualitatively confirm the mechanism of industry migration proposed in models like Duranton [Duranton, G., 2007. Urban evolutions: The fast, the slow, and the still. *American Economic Review* 97, 197-221].

### **Local labor force education, new business characteristics, and firm performance**

- *Journal of Urban Economics*---2010---Mark Doms,Ethan Lewis,Alicia Robb

It is often asserted that a highly educated workforce is vital to improving the competitive position of American businesses, especially by boosting entrepreneurship. To examine this contention, we use population Census



data and a new panel data of startup firms, to examine how the education and skill level of the local labor force are related to the creation and success of new businesses. This paper studies relationship between education, entrepreneurship, and businesses outcomes, and considers simultaneously both the education of the entrepreneur and of the workforce where the entrepreneurs operate their businesses. Consistent with this simultaneous focus, our initial results indicate that more educated entrepreneurs tend to be located in metropolitan areas with more educated workforces. Moreover, highly educated areas have above average entrepreneurship rates. Finally, the level of education of entrepreneurs is strongly related to positive business outcomes, especially for college graduates compared to those with less than a four-year degree.

### **Not Invented Here? Innovation in company towns**

- Journal of Urban Economics---2010---Ajay Agrawal,Iain Cockburn,Carlos Rosell

We examine variation in the concentration of inventive activity across 72 of North America's most highly innovative locations. In 12 of these areas, innovation is particularly concentrated in a single, large firm; we refer to such locations as "company towns". We find that inventors employed by large firms in these locations tend to draw disproportionately from their firm's own prior inventions (as measured by citations to their own prior patents) relative to what would be expected given the underlying distribution of innovative activity across all inventing firms in a particular technology field. Furthermore, we find such inventors are more likely to build upon the same prior inventions year after year. However, smaller firms in company towns do not exhibit this myopic behavior; they draw upon prior inventions as broadly as their small-firm counterparts in more diverse locations. In addition, we find that inventions by large firms in company towns have less impact than those produced elsewhere, although the difference is modest, and that the impact is disproportionately appropriated by the inventing firms themselves. Finally, the geographic scope of impact realized by company town inventions is narrower,

whether produced by large or small firms.

### **Buy local? The geography of venture capital**

- Journal of Urban Economics---2010---Henry Chen,Paul Gompers,Anna Kovner,Josh Lerner

We document geographic concentration by both venture capital firms and venture capital-financed companies in three metropolitan areas: San Francisco, Boston, and New York. We find that venture capital firms locate in regions with high success rates of venture capital-backed investments. Geography is also significantly related to outcomes. Venture capital firms based in locales that are venture capital centers outperform, regardless of the stage of the investment. This outperformance arises from outsized performance outside of the venture capital firms' office locations, including in peripheral locations. If the goal of state and local policy makers is to encourage venture capital investment, outperformance of non-local investments suggests that policy makers might want to mitigate costs associated with established venture capitalists investing in their geographies rather than encouraging the establishment of new venture capital firms.

### **Does local business ownership insulate cities from economic shocks?**

- Journal of Urban Economics---2010---Jed Kolko,David Neumark

We assess a prominent argument for local economic policies that favor locally-owned businesses - namely, that locally-owned firms are more likely to internalize the costs to the community of decisions to reduce employment and hence help to insulate cities from adverse economic shocks. We test this argument by examining how establishment-level employment responses to economic shocks are affected by establishment ownership. We find evidence that some types of local ownership do insulate regions from economic shocks, although the clearest benefits do not come from small, independent businesses, but instead from corporate headquarters and, to a lesser extent, from small, locally-owned chains.

## **Mom-and-Pop meet Big-Box: Complements or substitutes?**

- Journal of Urban Economics---2010---John Haltiwanger,Ron Jarmin,C.J. Krizan

In part due to the popular perception that Big-Boxes displace smaller, often family owned (a.k.a. Mom-and-Pop) retail establishments, several empirical studies have examined the evidence on how Big-Boxes' impact local retail employment but no clear consensus has emerged. To help shed light on this debate, we exploit establishment-level data with detailed location information from a single metropolitan area to quantify the impact of Big-Box store entry and growth on nearby single unit and local chain stores. We incorporate a rich set of controls for local retail market conditions as well as whether or not the Big-Boxes are in the same sector as the smaller stores. We find a substantial negative impact of Big-Box entry and growth on the employment growth at both single unit and especially smaller chain stores - but only when the Big-Box activity is both in the immediate area and in the same detailed industry.

## **Violent crime, entrepreneurship, and cities**

- Journal of Urban Economics---2010---Stuart Rosenthal,Amanda Ross

This paper estimates the impact of violent crime on the location of business activity and entrepreneurship in five US cities. Central to our analysis is the idea that different sectors of the economy will sort into high- and low-crime areas depending on their relative sensitivity to crime. We illustrate this by comparing retail industries to their wholesale counterparts, and high-end restaurants to low-end eateries. Because retail industries are dependent on pedestrian shoppers, they are expected to be especially sensitive to violent crime. Because high-end restaurants are dependent on evening business, they are expected to be especially sensitive to violent crime over the prime dinner hours. Findings indicate that retail, wholesale, high- and low-end restaurants are all more active in areas with higher local rates of violent crime, even after conditioning on

an extensive set of model controls. This could arise because violent crime is attracted to our target industries. This also likely reflects that other sectors of the economy outbid our target industries for safer locations (e.g. residential). Further analysis confirms such sorting behavior. Retailers are more likely to locate in safer locations as compared to wholesalers in the same industry. Among restaurants, an increase in violent crime during the prime dinner hours equivalent to the sample max/min range would decrease the high-end share of local restaurants by roughly 40 percentage points. These findings indicate that entrepreneurs take violent crime into account when bidding for locations within a city. These finding also indicate that efforts to make distressed portions of cities more vibrant must give consideration to the need to ensure that such areas are safe.

## **Clusters of entrepreneurship**

- Journal of Urban Economics---2010---Edward L. Glaeser,William Kerr,Giacomo Ponzetto

Employment growth is strongly predicted by smaller average establishment size, both across cities and across industries within cities, but there is little consensus on why this relationship exists. Traditional economic explanations emphasize factors that reduce entry costs or raise entrepreneurial returns, thereby increasing net returns and attracting entrepreneurs. A second class of theories hypothesizes that some places are endowed with a greater supply of entrepreneurship. Evidence on sales per worker does not support the higher returns for entrepreneurship rationale. Our evidence suggests that entrepreneurship is higher when fixed costs are lower and when there are more entrepreneurial people.