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Summaries of Doctoral Dissertations

The Dissertations of Sarah Quincy, Cory Smith, and Jessica LaVoice 2020 Allan Nevins Prize Competition of the Economic History Association

In September 2020, the members of the Economic History Association convened across different time zones and latitudes, for the first (and, one hopes, the final) virtual dissertation session. The last time I had moderated the panel for the Nevins prize was in 2008 when there were a financial crisis and a great recession. This time, there is a financial crisis, a great recession, AND a pandemic. However, I feel secure in the conviction that cliometricians will recognize that correlation does not imply causation.

The pandemic of 2020 has disrupted key institutions, overwritten central clauses of the social contract, and heightened concerns about economic inequality and social justice. As Allan Nevins (2018) pointed out, at such times as these, when humans are "harried and perplexed by the sweep of events, [they] peer earnestly into history for some illumination of their predicament and prospects." The dissertations under consideration as finalists for the Nevins prize all demonstrate that economic history is more important than ever for understanding vital problems of the present and for its ability to offer insights into more effective ways to attain a just society.

SARAH QUINCY completed her thesis as an affiliate of the unparalleled All-UC group in economic history, and this shows. For one, she thanks her advisors at Davis for instruction in the arcane art of (and I quote) "footnote surfing." Of course, the EHA does not yet give out prizes for surfing of any kind, but one cannot fail to be impressed by Quincy's deep-diving into the institutional context and intrepid attempts to get the details right. She crafts the project with artisanal care, making sure that the archival data, statistical tools, and level of aggregation match smoothly without the need for ad hoc econometric patches. The skeptical reader—yes, you will no doubt be surprised to learn that this is my default setting—finds her misgivings assuaged in the very next footnote or table.

Society does not seem to follow an evolutionary path of persistent upward progress, but rather one of the fully circular peregrinations. Google searches about the Great Depression have recently soared because the concerns of the 1920s have re-emerged in 2020. Quincy boldly goes where many economists have gone before: her captivating thesis is set in Depression-era California, and she manages to add new facets to this well-burnished topic, in itself a high achievement. Her project explores how credit-market frictions can constrain household spending, which has implications for resolving the longstanding puzzle in macroeconomics of how changes in nominal variables might have persistent real consequences. In one sentence: she essentially argues that what was good for Bank of America was good for California.[1]

[1] A.P. Giannini (1870–1949) founded in 1904 the institution that would become the Bank of America. As an aside, it seems appropriate that a dissertation about his bank's contributions should be written at Davis. In 1928, Bank of America set up an endowment of $1.5 million to establish the Giannini Foundation of Agricultural Economics at the University of California, whose activities largely involve the Davis, Berkeley, and Riverside campuses.

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Quincy exploits the branching activities of the Bank of America as a proxy for enhanced access to credit. The bank's overall loan-deposit ratio was stable during this period, unlike those of many other competitors. As a result, areas with a Bank of America branch suffered less and were more resilient to the adverse economic shocks. Within a decade, cities with Bank of America branches experienced 25 percent growth, compared to the stagnation of communities without access to one of these branches. In California, labor and education markets provided a conduit through which the variation in financial liquidity affected real adjustments. Further evidence regarding the role of credit constraints at the individual level includes the relative success of WWI veterans over their counterparts, arguably owing to the unexpected cash bonus offered to those who had served in the war.

Hugh Rockoff once told me with his usual tendency for wry understatement: *it's hard to identify causal factors during the Great Depression*. Quincy's econometric methods are fastidious and thorough. However, the methodology at times is overly focused on nonrejection of a preferred claim rather than attempting to evaluate all potential sources of heterogeneity. (Aspiring economists are further advised to avoid reasoning that takes the form: "the answer is either x or y; I have shown it is not x, therefore it must be y.") Effective identification of an exogenous credit supply shock requires a randomized allocation of Bank of America branches. A battery of tests is deployed to decimate "threats to identification" (in capital letters) related to this assumption. Nevertheless, quantitative analysis must always be consistent with economic rationality, and it seems implausible that any large profit-maximizing corporation would essentially roll the dice in choosing its branch locations. I am actually a stockholder in Bank of America, and I would promptly sell off all my shares if their expansion strategy were not driven by systematic factors like expected profitability. As such, the argument would be strengthened by making adjustments for endogeneity and confirming that the results persist.

This dissertation makes important contributions to the literature but would arguably be even more compelling after a few adjustments. The author constructs too grandiose an edifice on the elegant but slight foundation of what is, after all, a simple binary variable about the presence of a Bank of America branch. There is a marked lack of systematic evidence to back up crucial assertions such as the credit-smoothing operations across Bank of America branches relative to other institutions, especially during this major downturn when risks were more likely to be correlated. Such data may not be available for Bank of America itself during the Depression, but it would be worthwhile to acquire them for other time periods or other financial institutions. Moreover, the central claims about Bank of America's superior credit injections are based almost exclusively on the aggregate loan-deposit ratio. However, banking liabilities consist of deposits plus capital, so it is important to more fully address variation in bank capitalization. It would likewise bolster the argument to control for other related measures such as dividend payouts.

A more convincing analysis would further address alternative forms of financing outside the commercial banking sector, which could potentially account for the observed patterns. Along these lines, it would be relevant to assess the elasticity of substitution across these different sources of funds. This excursion beyond banking institutions is especially necessary to gauge the effect of credit constraints on housing markets. In

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particular, around 40 percent of home buyers obtained loans from Building and Loan associations, which at that time introduced important and persistent innovations that benefited borrowers (Rose and Snowden 2013).

California was the destination for the largest inflow of migrants in the country, many from the lower end of the income distribution, during this period. Bank of America was self-celebrated as a bank for immigrants and the "little fellow," as we tangentially observe in the chapter on education. Moreover, Bank of America was a pioneer in women's banking, with an independent Women's Banking Department where female customers could manage their finances on their own account (literally and figuratively) and obtain investment advice and education. Future work could usefully investigate the distributional effects of funding for such relatively disadvantaged groups.

California was "the great exception," according to Quincy, because Bank of America was the great exception. I am certainly willing to buy this. But she further insists that Bank of America affected outcomes "solely through its willingness to lend." This is overselling. It makes me wonder about the multi-faceted world beyond these regressions. After all, like any financial institution, Bank of America's impact was not merely from doling out cash but rather through a multitude of channels and relationships such as the close monitoring of borrowers, the attenuation of risk, and provision of advice and information.[2] There was widespread ownership in the bank itself, even among the "little people," who benefited from expected gains and distributions related to ownership of its shares (it is worth noting that a great deal of speculation in Bank of America shares was occurring over this period). According to Carlson and Mitchener (2009), branch banking generated positive externalities by compelling greater efficiency among competing financial institutions in a manner that increased the likelihood that they would survive the Great Depression.

Nevins thought that good history requires a narrative, and this dissertation complies with that directive, offering a coherent thesis rather than three disjoint essays. In short, this is a fruitful study that in the future can branch out in many different directions. (Yes, I agree that puns are dreadful, but this is a small tribute to Sarah Quincy, who is on record as declaring puns to be the highest form of humor.)

Now we're going to *Zoom* from the University of California on the West Coast to MIT on the East Coast. (And I solemnly promise on my well-thumbed copy of the *Wealth of Nations* that this is the last pun.) CORY SMITH's dissertation offers thought-provoking perspectives on race, inequality, and climate change over place and time. In the modern knowledge economy, land has seemingly been designated as the fourth factor of production; Smith's research reminds us of its important role in economic development.

As every schoolchild and reader of the *Journal of Economic History* should know, federal and state governments subsidized the construction of canals and railroad transportation networks, through conveyances of adjacent real estate tracts. Scholars such as Robert Fogel and Lloyd Mercer held a generally favorable view about land-grant

[2] Bank of America's "chief contribution was not in money, however, but in counsel and leadership in devising and putting through plans for refinancing," according to James and James (1954, p. 406). Part of the success of branch banking was in the resemblance to universal banking, such as the ability of the central institution to facilitate upstream and downstream alliances with greater efficiency, owing to its access to information about all parties.

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policies, which they regarded as rational and appropriate in their form and size, whereas Stanley Engerman was more ambivalent about the need for transfers and redistribution. Several other economic historians held that the net outcome in overall social welfare was negative, and populists similarly decried these handouts as a form of feudal capitalism or capitalist feudalism. Land conveyances to a railroad corporation did not occur with a single flourish of the pen, but through a process that typically lasted decades, so it is perhaps inevitable that quantitative evaluations of these grants would remain contentious.

Smith's essay revitalizes this hoary debate about federal land grants that was most vociferous around the 1960s. He examines links between railroads, ownership concentration, and efficiency in land markets. Aligning himself squarely within the camp of the pessimists, he contends that the negative consequences of this policy persist to the present. Today, American agriculture is certainly highly concentrated, but it should be emphasized that many other forms of land use, such as timberland, have become even more concentrated than farms. Even in the 1940s, the Department of Agriculture estimated that just 3 percent of owners held over 40 percent of farmlands. Most theorists and empirical researchers concur that economies of scale are in part responsible for the high observed productivity in land use among large farms and the corresponding decline in the viability of family farms (Key 2019).

Smith finds that railroad grants were associated with greater land concentration, but he dismisses the conventional arguments about the benefits of economies of scale and large size in accounting for these patterns. Instead, he contends that the federal land grant policies, by enabling greater concentration in landholdings, resulted in efficiency losses that have persisted to the present time. These adverse effects from land grants are much larger than a paltry few dollar bills left on the ground. Rather, losses from the policies of the distant past amount to fully 23 percent of investment and a population penalty of 8 percent in the present. He concludes that concentration in land ownership reduced prospects for economic development, and "despite the passage of roughly 150 years since the policy's enactment, these basic effects remain in place."

Like the other two panelists, this dissertation exhibits expertise with an impressive range of statistical techniques. We are offered binary quadratic optimization using state-of-the-art algorithms, intriguing discussions about quantile effects on the inverse hyperbolic sine of land values, and ruminations on bandwidth robustness. At the same time, excellence in applied econometrics is necessarily bounded by the quality and appropriateness of the data, and these seem less than persuasive. (And, call me reactionary, but I would willingly sacrifice insights regarding bandwidth robustness in exchange for some plain-vanilla summary statistics.)

Smith has been exceedingly diligent, but the sources of data for this project still comprise a greater checkerboard than the land grant patterns themselves. The modern outcome variables are from six not entirely representative states: Florida, Kansas, Montana, Nebraska, Oregon, and Wyoming. The historical records incorporate a vertiginous range of locations, sources, periods, and inconsistent types, such as 1912 tax data from Morrill County, Nebraska; property assessments from Lincoln County in 1965; farms in 40 Nebraska and Kansas counties in 1940. Along with a detailed study of the southern part of Banner County, Nebraska. The optimal size of a holding will depend on the type of crop, soil fertility, aridity, and temperature, and the analysis creatively includes such controls.

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The chapter's central claim is that proprietors of large railroad grants were unable to manage the land themselves and therefore inefficiently subcontracted to tenants and sharecroppers. However, the key variable of tenancy is inferred rather than observed. The names of landowners were matched in the 1900 census and, if no match was found within the same county, it was assumed that the farm was worked by tenants. This empirical strategy is obviously problematic. I would also recommend that the author direct some attention to heterogeneity in tenancy. Ownership status was neither binary nor fixed and typically varied with age. This was especially true for families: a quarter of landlords rented to their sons, who often started as a laborer and then progressed to tenant, and finally owner. In addition, if any one plot size was suboptimal, tenants could and did rent land from more than one person to attain a larger scale.

True believers in Coasean market efficiency are unlikely to be persuaded that real estate markets were land-locked and suboptimal for more than 150 years. What were the transaction costs that could have prevented such large value-increasing trades? The proposed answers turn out to be the least satisfactory part of this chapter. Smith suggests (oddly) that it would have been too costly for farmers to move from their houses. He also speculates that prospective buyers were likely to be paralyzed by prohibitively high information costs in land markets. At the same time, the presence of excessive information costs seems to conflict with his proposed optimal policy; that the federal administrators should have given out lower-quality land to the railroads and turned over the higher-quality lots to small homesteaders.

The two co-authored papers in the dissertation are rather more optimistic about market forces. As the song says, "a boll weevil is an insect. And he's found mostly where cotton grows." For impartial economists, the boll weevil is not a heinous pest whom the bigoted farmer should wish to consign to ****, but rather a literally natural experiment to fuel their difference-in-difference engines. Consequently, a long list of articles has investigated the nature and consequences of boll weevil infestations, and many come down decidedly on the side of the boll weevil. They argue that its spread exerted a benign influence manifested in improvements ranging from education to health, labor market conditions, and nutrition. In fact, the naïve observer might even wonder whether policymakers would not be better advised to reintroduce the boll weevil as a cost-effective means of promoting social progress.

According to Smith et al., the boll weevil once again features as a force for good. The exogenous negative economic shock of the infestation created incentives for a decline in racial violence. They measure systemic violence in terms of lynchings and the building of confederate memorials. The major result is that lynchings at the time fell by 0.04 and statues by 0.003 per year in the average county. These coefficients might pass the t-test, but they offer a very faint signal indeed, especially in per capita terms. And of course, it is possible that counties with boll weevil infestations were less likely to invest in confederate memorials simply because they were short of funding. The analysis overlooks other forms of violence, such as murders by shooting and property damage that might have replaced lynchings, as well as nonviolent methods of racial suppression. Moreover, one would like to know whether crimes against blacks increased in the locales to which they migrated outside the South.

The authors find long-run correlations between infestation in 1892–1922 to outcome variables in the 1960s. In these sorts of analyses, a major question is always: What is the mechanism that continuously connects time period A to time period B? They answer that

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out-migration triggered fundamental reforms in systemic racism and its manifestations. By contrast, other studies have found negative social effects from economic shocks like the boll weevil, including higher rates of black incarceration and political repression. One, therefore, wonders why the migration mechanism selectively improved outcomes in terms of lynchings and monument installations, but not in terms of the other facets of institutionalized racism which have endured to the present day.

In all three of the essays in this dissertation, there is a delicate question about *size*—or the magnitude of the effects in question. The third chapter considers "the long run in the future," and shows how international trade can moderate the negative effects of climate change. Smith and his co-authors analyze secondary data from 2009, as well as predictions that others have made regarding agricultural output, land use, and prices. The scope of the data set is comprehensive, covering the 10 major crops in over a million fields in 50 countries. (As an aside, I was surprised to learn that tomatoes accounted for a larger share of world output than potatoes.) They find that global GDP would fall by around 0.34 percent and, if markets adjust, by 0.26 percent instead. The paper does not consider shifts in comparative advantage toward the nonfarming sector, which would likely shrink the adverse effects even further. If we believe these results, the predicted effect of climate change on overall economic welfare appears to be rather small potatoes/tomatoes. Food for thought! (And now you know what my pun-related promises are worth.)

JESSICA LAVOICE completed her dissertation at the University of Pittsburgh, and it is a shame that it was not possible for us all to be celebrating there, instead of sheltering in our own sitting rooms.

Her trio of essays presents different perspectives on the economic history of race and inequality. The Keystone project in the thesis (the pun here is more subtle, hence the parenthesis) considers the consequences of urban renewal projects in terms of racial disparities. These measures are designed to improve the quality of a neighborhood, but a corollary is that the supply of affordable housing declines, likely creating a disproportionately negative impact on socially disadvantaged groups and lower-income residents. Prior research on these programs found a significant positive overall effect on cities and concluded that observed outcomes were unrelated to race. But it was possible that the level of aggregation in the studies might elide relevant underlying heterogeneity, so LaVoice approaches the analysis at the more appropriate neighborhood level.

The data set covers the largest U.S. cities, incorporating the locations and land use of 200 urban renewal projects authorized by the Housing Act of 1949. Fourteen percent of majority-black areas were redeveloped, and these locales were more likely than equivalent white neighborhoods to be targeted, holding other factors constant. Interestingly, expansions in streets and highways were the second-largest form of urban renewal. As a result, we observe a process of gentrification where the quality of the neighborhood improves and more non-residential spaces are developed, but the supply of affordable housing correspondingly decreases.

LaVoice concludes that low-income black households were made worse off by urban renewal policies. She presents a spatial equilibrium model of locational choice, which incorporates the assumption that low-income households initially revealed a preference for a low-quality neighborhood with low housing prices. Thus, for nonmovers, "it must be the case" that they are worse off when both price and quality go up after urban renewal. One wonders instead whether these groups might have confronted

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constraints that prevented them from attaining higher utility from a different price-quality combination.

Silicon Valley types like to say that the last mile matters most, and this is also true of cliometrics. The last mile would include more institutional context. The last half-mile requires greater attention to the measurement of housing quality and urban blight, unobserved variation in neighborhood crime, the role of ethnicity, and social capital in communities that were cleared. For instance, the share of houses needing major repairs was not statistically significant, which suggests to me that the variable was mismeasured, rather than that decrepit buildings did not influence the likelihood of slum clearance. A more complete analysis would attempt the valuation of benefits from access to improved amenities like transportation and parks and perhaps improved employment prospects. We also need to know what was happening just beyond the boundaries of these urban projects. It would be especially valuable to try to acquire information on the status of displaced residents after removal. Had some of them, like TV's Jefferson family, "moved on up to the east side, to a deluxe apartment in the sky"?

This dissertation, to a far greater extent than any of the other submissions, offers a master class in applied econometrics using historical data. LaVoice revels in dealing with kernel densities, SHapley Additive exPlanations of gradient boosted trees estimation and the like. This project is especially to be commended for its creative solution to selection problems by painstakingly constructing synthetic control groups matched on race, population and housing density, median rents, and income. As a specialist in law and economics, I would encourage the author to apply these methods to evaluate eminent domain policies in economically-disadvantaged areas like Poletown in Detroit.

Popular discussions about racial discrimination and recent calls for reparations to blacks have pointed to redlining as a source of economic harm. The second chapter in this thesis convincingly refutes such claims. Hillier (2003) had used archival material to show that redlined maps were not commonly used and were not associated with racially-motivated variation in lending. LaVoice et al. likewise find that redlining was not associated with racial differences in housing outcomes. Indeed, although whites were lower-risk borrowers, they made up the vast majority of the redlined population. The analysis and exposition are comprehensive and compelling and can be pointed to as a model for excellence in economic history. Here I would just offer two minor comments for consideration. First, the data are restricted to the largest cities in the United States in 1930 and 1940, but it would be interesting to assess variation in city size. Second, the authors conclude by proposing that racial bias in private markets caused blacks to cluster in low-income neighborhoods; and the federal government engaged in "malignant neglect" because it ought to have taken active measures to deal with this alleged private market discrimination. These assertions exceed the evidence and thus appear to be overly normative, if only by contrast with the meticulous empirical work disproving charges that redlining enabled invidious racial discrimination in housing.

The final essay deals with race and debt collection, again using neighborhood-level information. A judgment is the last step in a routine debt collection process, and an outcome in favor of the plaintiff who is pursuing a debtor allows for more effective enforcement of the outstanding claim. The data are limited to court decisions on debt collection cases in Missouri from 2004 to 2013, which are alleged to be representative

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of other jurisdictions. Race is inferred from names rather than observed, and zip codes are used to link the cases to credit reports and other location-specific variables. LaVoice and her co-author find that debt collection cases are more likely to occur in predominantly black neighborhoods. Decisions tend to favor plaintiffs in these areas, even after accounting for differences in income, credit scores, and other neighborhood characteristics. The quantitative results are quite modest: zip codes with a majority of black residents experience 0.6 more judgments per 100 individuals.

This project is still a work in progress. First of all, legal judgments are obviously brought against individuals, not against neighborhoods. Averages across zip codes cannot capture the most relevant sources of heterogeneity, such as debtor recidivism and default risk, nor identify the specific mechanisms affecting racial differences in debt collection judgments. It is unclear why we should be concerned that neighborhoods experience different outcomes in debt cases, especially since the authors acknowledge that the results provide no evidence of unfair discrimination against blacks. Second, American debt collection processes are routine and straightforward and perhaps overly-biased against *creditors*. There are rules to protect debtors against "bad actors"; for instance, if creditors act outside the law, they could be required to pay all legal costs for both parties. Third, the dataset is limited to cases that resulted in a judgment. A serious selection effect arises because the vast majority of all disputes are not entered in court records, and only a minute fraction will further survive through to judgment. Such selection effects compromise our ability to make inferences about bias from the proportion of plaintiff wins. The authors are advised to engage with the prolific empirical and theoretical scholarship in law and economics on such issues and to integrate their own findings in this literature.

Overall, these three impressive scholars embody what Nevins called the "spirit of critical inquiry for the whole truth" and are all deserving of high accolades. The panelists are advised that any "criticisms are merely a request for more information," as a marketing manager once told me on a flight from Tunisia to Malta.

It has been a privilege to have the opportunity to read all of the dissertations that were submitted for the Nevins Prize. This process makes one reflect on the discrete changes in the field of cliometrics that have occurred over the past decade. It is evident that a "new new economic history" is unfolding that leverages machine learning, cheap access to large-scale data, and enhanced econometric techniques. At the same time, these technological developments are a mere gloss that has not altered the fundamentals of excellence in economic history. The best research studies demonstrate that history is more than a source of quasi-random variation to identify causality. The Nevins prize today, as always, recognizes originality and creativity, neurotic attention to getting the details right, clarity in economic reasoning, and research interests with broad social relevance.

I must confess that it is somewhat ironic that I should be the czar/czarina for the award of the Nevins Prize. My new book, *Inventing Ideas: Patents, Prizes, and the Knowledge Economy*, reveals the inefficiencies of administered systems like prizes, relative to market-oriented rewards (Khan 2020). And we certainly observe in this context many of the drawbacks of administered systems of awards. First, even though all dissertations might be deserving, no more than three can appear in this panel, and only one can win the prize. Second, a total of 20 people were directly involved in these three dissertations, including co-authors and supervisors, but only one author will be

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rewarded. Third, decisions in administered systems clearly reflect the subjective preferences and standards of the judges in the process. Nevertheless, it is reassuring to note that all of these worthy dissertation candidates, regardless of whether or not they were nominated for this prize panel, will be compensated in the marketplace.

Despite these caveats, the award of the Nevins prize is especially important in a world where the validity of science and data themselves are being denied. When the members of the EHA gather to celebrate the achievements of Hugh Rockoff and our dissertation panel, we also reaffirm the commitment of the field of economic history to the pursuit of quality, fact-based inquiry, and the highest standards of academic integrity.

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REFERENCES

Boggart, Ernest Ludlow. "Farm Ownership in the United States." *Journal of Political Economy* 16, no. 4 (1908): 201–11.

Bordo, Michael D., Claudia Goldin, and Eugene N. White, eds. *The Defining Moment: The Great Depression and the American Economy in the Twentieth Century*. Chicago: University of Chicago Press, 2007.

Calomiris, Charles W. "Financial factors in the Great Depression." *Journal of Economic Perspectives* 7, no. 2 (1993): 61–85.

Calomiris, Charles W., and Joseph R. Mason. "Consequences of Bank Distress during the Great Depression." *American Economic Review* 93, no. 3 (2003): 937–47.

Carlson, Mark, and Kris James Mitchener. "Branch Banking as a Device for Discipline: Competition and Bank Survivorship during the Great Depression." *Journal of Political Economy* 117, no. 2 (2009): 165–210.

Collins, William J., and Katharine L. Shester. "Slum Clearance and Urban Renewal in the United States." *American Economic Journal: Applied Economics* 5, no. 1 (2013): 239–73.

Hillier, Amy E. "Redlining and the Home Owners' Loan Corporation." *Journal of Urban History* 29, no. 4 (2003): 394–420.

Inman, Buis, and William H. Fippin. *Farm Land Ownership in the United States*. No. 699. U.S. Dept. of Agriculture, Bureau of Agricultural Economics, 1949.

James, Marquis, and Bessie Rowland James. *Biography of a Bank, the Story of Bank of America*. New York, NY: Harper and Brothers, 1954.

Key, Nigel. "Farm Size and Productivity Growth in the United States Corn Belt." *Food Policy* 84 (2019): 186–95.

Khan, B. Zorina. *Inventing Ideas: Patents, Prizes, and the Knowledge Economy*. New York, NY: Oxford University Press, 2020.

Nevins, Allan. *The Gateway to History*. New York, NY: Routledge, 2018.

Rose, Jonathan D., and Kenneth A. Snowden. "The New Deal and the Origins of the Modern American Real Estate Loan Contract." *Explorations in Economic History* 50, no. 4 (2013): 548–66.

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Back to Good Times: The Real Effects of Credit in Great Depression California

Founded in 1904 by A.P. Giannini as the Bank of Italy, Bank of America became the third-largest bank by deposits in the United States in 1929. By building a unique, state-spanning branch bank network, Bank of America reshaped California's local banking markets in the 1920s (Carlson and Mitchener 2009). During the 1930s, Giannini defied regulators and pushed Bank of America to maintain its pre-crisis loan supply as California's per capita personal income plummeted 45 percent.[1] My dissertation examines the effect of this "huge financial octopus" on several aspects of California's economy throughout the Great Depression (Bonadio 1994).

In 1932, Bank of America spent $300,000 on "Back to Good Times" posters; this thesis finds that the bank's expansive lending policies helped California do just that, though with some unintended consequences (Bonadio 1994). I collected detailed individual, city, and bank-level information from a variety of archival sources to emphasize the importance of household heterogeneity in labor market composition, housing markets, and educational attainment. These data highlight how differences in household-level responses to the credit supply shock affected the scope of the aggregate recovery. In the first chapter, I show that cities in Bank of America's pre-Depression branch network had smaller economic contractions and more robust recoveries in the 1930s than their non-branched counterparts through a skill-biased labor reallocation channel. The second chapter turns to the housing market recovery. I find that the unexpected passage of the 1936 Veterans' Bonus boosted WWI veterans' housing outcomes relative to those of their 1930 next-door neighbors. Feedback between individual and local liquidity was key; increases in home values were concentrated among veterans in already booming markets. The third chapter, co-authored with Zachary Bleemer, demonstrates that the Bank of America lending shock affected the second generation of workers through its effects on the spatial distribution of human capital formation and intergenerational mobility.

As in many financial crises, the recovery from the Great Contraction was protracted (Reinhart and Rogoff 2009; Schularick and Taylor 2012). Motivated by the seminal work by Friedman and Schwartz (1963) and Bernanke (1983) on the causes and immediate domestic consequences of banking frictions, empirical work has emphasized the importance of monetary policy-induced declines in the money supply and shortfalls in financial intermediation for explaining the size of the recession (Calomiris and Mason 2003; Richardson and Troost 2009). A similarly large literature has examined a variety of channels through which the economy recovered.[2] This thesis focuses on the role in the economic recovery played by the variation in financial crisis intensity both within and between locations, tying together these two vast bodies of work on the American Great Depression.

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[1] Bank of America's loan-deposit ratio remained stable at 0.64 from 1929 to 1933, unlike the average for the rest of the state, which fell from 0.70 to 0.54 over the same period. This was driven by loans, not deposits; Bank of America's lending decline from its 1929 peak to 1934 trough was half the California unit bank median over that period.

[2] See Fishback (2017) for a recent review on the recovery from the Depression, particularly for the role of government policy.

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"LOANS FOR THE LITTLE FELLOW:" CREDIT, CRISIS, AND RECOVERY IN THE GREAT DEPRESSION

This chapter demonstrates that local credit availability changed labor market fundamentals during the banking crises of the early 1930s, leading to differences in both the size of the economic contraction and the extent of the recovery. First, I provide direct evidence that local credit market disruptions played a significant role in cities' economic growth throughout the 1930s. Then, using linked census data, I establish a new set of stylized facts on the labor market effects of financial crises. Positive crisis credit supply shocks disproportionately shifted labor into nontradable industries and out of agriculture. Recent analysis has examined the ways in which the manufacturing and agricultural sectors amplified the negative effects of banking instability during the early 1930s (Benmelech, Frydman, and Papanikolaou 2019; Hausman, Rhode, and Wieland 2019; Ziebarth 2013). This chapter demonstrates that the nontradable sector had a sizeable impact on the health of the local economy even well into the recovery due to its relatively high concentration of skilled occupations. I isolate this skill-biased structural transformation using a new panel of city-level financial and economic data constructed from state tax reports, court documents, congressional hearings, census microdata, and bank balance sheets.

The first set of results establishes the causal effect of local credit supply shocks on local economic growth from 1929 to 1940. Building on Carlson and Mitchener (2009), I show pre-crisis access to Bank of America was positively correlated with local lending growth from 1929 to 1934 but not city economic activity trends before 1929. In contrast, the post-1929 dynamic effects were large. Higher levels of local loan supply halved the contemporaneous contraction, confirming earlier analysis of the 1930 to 1932 waves of bank crises (Calomiris and Mason 2003). The initial real effects compounded in the recovery; not only did Bank of America-branched economies recoup their losses sooner, but they grew substantially in the latter half of the 1930s. Access to this large, unusually generous bank both softened the initial recession and accelerated cities' economic recoveries.

Bank of America's lending policy altered the composition of local employment by reallocating labor towards high-skilled occupations. I compare male California workers' labor outcomes based on their exposure to the aggregate credit shock during the 1930s, controlling for pre-crisis characteristics with the automated matching between the 1930 and 1940 population censuses. Levels of unemployment and labor force participation did not vary based on crisis credit conditions, confirming that even non-branched places had recovered from the Depression by 1940. Although aggregate employment was similar, cities' occupational and industrial shares had shifted based on credit supply exposure, which explains why workers in Bank of America-branched areas were earning higher wages in 1940 than their non-branched equivalents. Workers had moved out of agriculture and into higher-skilled retail and service work in credit-rich areas, which, crucially, were consumed and produced locally. Even in the recovery, spatial differences in loan supply affected the skill composition of the economy, leading to continued divergence in economic growth.

LIQUIDITY CONSTRAINTS AND HOUSING MARKETS: EVIDENCE FROM THE WWI VETERANS' BONUS

The New Deal sought to stimulate moribund mortgage lending markets and reduce the debt service burden on existing mortgages. However, geography directly shaped New Deal housing policy through practices such as redlining, making it difficult to

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disentangle the impact of household behavior from regional economic responses. In the second chapter of my dissertation, I examine the housing market effects of the WWI Veterans' Bonus, circumventing these issues. In 1936, WWI veterans received a surprise payment which was on average equivalent to one year of income, which many of them earmarked for housing consumption (Hausman 2016).[3]

I show that the Veterans' Bonus benefited WWI veterans on both the home ownership and home value margins, which is consistent with recent analysis on several New Deal housing programs summarized in Fishback (2017). I expand on prior work by using an observable individual variation, which allows me to analyze both the direct and spillover effects of cash shocks on housing markets during the 1930s. The Bonus effect was largest in Bank of America-branched places, suggesting some degree of non-veteran crowdout in housing markets with more local liquidity provision.

To account for a variety of potential threats to identification, like housing preferences and pre-Depression characteristics, I compare WWI veterans to their 1930 next-door neighbors. Census enumerators were instructed to go door to door when canvassing, so households located next to each other on the census sheet were extremely likely to be neighbors. Then, again applying an automated linking algorithm to the 1930 and 1940 full count censuses, I construct a panel of WWI veterans and their pre-Bonus neighbors' housing outcomes.

The Veterans' Bonus provided a substantial benefit to WWI veterans during a period of limited credit availability. Eligibility for the Veterans' Bonus offset between one-tenth and one-sixth of the aggregate decline in housing prices from 1930 to 1940. These results are even larger when considering only those who sought out mortgages during the Depression. Veteran renters in 1930 had 1940 homeownership rates and home values relative to their non-veteran renting counterparts, which were roughly 1.25 to 1.5 times larger than the baseline difference. These effects were magnified by the size of the economic recovery; the gap between veterans and non-veterans was widest in Bank of America-branched areas. Even in local economic booms, liquidity provision largely benefited those who received it directly, indicating there was limited potential for spillovers to redistribute these gains.

HUMAN CAPITAL FORMATION AND REGIONAL RECOVERY FROM THE GREAT DEPRESSION

The final chapter of the dissertation, co-authored with Zachary Bleemer, turns to the impact of the financial crisis on new workers. We examine how regional Depression severity, proxied by Bank of America's 1929 branch network, affected college-going behavior during the 1930s. Our focus on how education affects intergenerational mobility builds on earlier work by Goldin and Katz (1999) to show how the composition of college-going changed in the Great Depression based on childhood income and local economic conditions.

First, we examine college-going from 1920 to 1940 using a newly constructed database covering most university students in California over that period. Digitized from university registers, these data include students' names, hometowns, fields of study,

[3] An American Legion survey indicates that on average, veterans planned to spend 16 percent on buying a new home, 8 percent on housing improvements, and 31 percent on old bills and debts, including mortgages.

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and years of enrollment and cover all four-year public and several private California colleges and universities. Although college-going was already relatively widespread for both men and women in this setting, there were significant gender differences in major choice. Women were largely letters and science majors while men were more evenly split between letters and sciences, business, chemistry, and agriculture. The latter two degrees earned particularly high returns in terms of 1940 wage and salary income.

With these stylized facts in hand, we turn to the effect of local business conditions on college sending behavior. We measure the effect of Bank of America's presence on the number of first-year students in each city sent to college each year in a difference-in-difference approach.[4] Reassuringly, in the 1920s, there were no differences in college-sending behavior by Bank of America status. During the Depression, however, Bank of America-branched towns were more likely to send students to college.

The last piece of analysis matches the college registers to the 1930 and 1940 censuses, linking Depression severity, major choice, and labor market returns for men attending college in California in the 1930s. The average household occupation score, a measure of parental socioeconomic status in the 1930 census, fell during the 1930s for students from Bank of America-branched towns. Despite this decline in childhood socioeconomic status, these students earned higher incomes in 1940 due to their move into high-return majors. Regional variation in Depression magnitude, therefore, altered the geography of intergenerational mobility through the combination of these shifts in college attendance and major selection.

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REFERENCES

Benmelech, Efraim, Carola Frydman, and Dimitris Papanikolaou. "Financial Frictions and Employment during the Great Depression." *Journal of Financial Economics* 133*,* no. 3 (2019): 541–63.

Bernanke, Ben S. "Nonmonetary Effects of the Financial Crisis in the Propagation of the Great Depression." *American Economic Review* 73, no. 3 (1983): 257–76.

Bonadio, Felice A. *AP Giannini: Banker of America*. Berkeley, CA: University of California Press, 1994.

Calomiris, Charles W., and Joseph R. Mason. "Consequences of Bank Distress during the Great Depression" *American Economic Review* 93, no. 3 (2003): 937–47.

Carlson, Mark, and Kris James Mitchener. "Branch Banking as a Device for Discipline: Competition and Bank Survivorship during the Great Depression." *Journal of Political Economy* 117, no. 2 (2009): 165–210.

Fishback, Price. "How Successful Was the New Deal? The Microeconomic Impact of New Deal Spending and Lending Policies in the 1930s." *Journal of Economic Literature* 55, no. 4 (2017): 1435–85.

Friedman, Milton, and Anna Jacobson Schwartz. *A Monetary History of the United States, 1867–1960*. Princeton, NJ: Princeton University Press, 1963.

[4] Bank of America advertised that it lent to college students and helped future attendees save for college, suggesting that using the Bank of America network as an instrument for economic activity changes would violate the exclusion restriction. Instead, we interpret Bank of America's effect during the 1930s as a joint local credit and business cycle measure.

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Goldin, Claudia, and Lawrence F. Katz. "The Shaping of Higher Education: The Formative Years in the United States, 1890 to 1940." *Journal of Economic Perspectives* 13, no. 1 (1999): 37–62.
Hausman, Joshua K. "Fiscal Policy and Economic Recovery: The Case of the 1936 Veterans' Bonus." *American Economic Review* 106, no. 4 (2016): 1100–43.
Hausman, Joshua K., Paul W. Rhode, and Johannes F. Wieland. "Recovery from the Great Depression: The Farm Channel in Spring 1933." *American Economic Review* 109, no. 2 (2019): 427–72.
Reinhart, Carmen M., and Kenneth S. Rogoff. *This Time Is Different: Eight Centuries of Financial Folly*. Princeton, NJ: Princeton University Press, 2009.
Richardson, Gary, and William Troost. "Monetary Intervention Mitigated Banking Panics during the Great Depression: Quasi-Experimental Evidence from a Federal Reserve District Border, 1929–1933." *Journal of Political Economy* 117, no. 6 (2009): 1031–73.
Schularick, Moritz, and Alan M. Taylor. "Credit Booms Gone Bust: Monetary Policy, Leverage Cycles, and Financial Crises, 1870–2008." *American Economic Review* 102, no. 2 (2012): 1029–61.
Ziebarth, Nicolas L. "Identifying the Effects of Bank Failures from a Natural Experiment in Mississippi during the Great Depression." *American Economic Journal: Macroeconomics* 5, no. 1 (2013): 81–101.

Land Use and Long-Run Development

Historically, most economies were agrarian, making land one of their most important productive assets. A key question, then, is how land use can shape economic development over the long run. My thesis aims to answer three different versions of this question, each with different understandings of "development." The first essay considers the long-run effects of historical land concentration on agricultural investment and productivity in the frontier United States. The second essay considers how disruptions to agriculture in the U.S. South, in the form of the boll weevil pest, changed the political economy of the Jim Crow South. The final essay considers the long run in the future, using agronomic microdata to assess the impact of climate change on agricultural productivity.

LAND CONCENTRATION AND LONG-RUN DEVELOPMENT IN THE FRONTIER UNITED STATES

My first chapter studies a long-standing question in economics regarding the relative efficiency of different modes of land ownership. This question has interested economists at least since Adam Smith, who favored owner cultivation. Smith and some other contemporaries argued that large landlords harmed productivity through the weak incentives of their workers and rent-seeking behavior (Smith 1776), a concern formalized

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into classic economic theory by Marshall (1946). On the other hand, landlords might be able to contract around any inefficiencies (Cheung 1969) and could provide the benefits of scale economies in agriculture or public goods provision (Allen 1988; Hornbeck and Naidu 2014; Olmstead and Rhode 2001; Dell 2010). Finally, the Coase Theorem (Coase 1960) holds that under ideal conditions, market transactions will efficiently distribute productive assets regardless of initial allocations. In practice, such dynamics depend on the size of transaction costs and the enforceability of property rights (Hornbeck 2010; Jones et al. 2019). Throughout history, different societies have distributed land in diverse fashions, but it is thus unclear which, if any, could positively impact long-run prosperity.

In this chapter, I use a natural experiment embedded in American land policy to quantify the effects of land concentration on the long-run economic development of frontier areas. Although this region is often popularized as the domain of hard-scrabble pioneers, the reality was more complex. My work contrasts the effects of two major pillars of nineteenth-century American land policy, which collectively distributed about 25 percent of the country's area in a foundational time for many of its states. With the 1862 Homestead Act, the Union government aimed to reserve the frontier for small farmers, instituting a maximum size for settlers' plots. Paradoxically, however, the government simultaneously gave large areas in grants to railroad companies as payment for their construction efforts. These companies, in turn, auctioned their properties off in sizable blocks to wealthy purchasers. The two policies were frequently applied arbitrarily in a checkerboard board pattern, meaning square miles of land were settled either by small farmers or large owners in an alternating pattern. The locations of these squares were pre-determined by land survey systems, meaning that the two groups of land were statistically equivalent in terms of their characteristics.

Drawing on several original data sources, I find that that historical land concentration led to fewer, less developed farms. Low levels of investment by large landlords in the 1800s are still apparent in reduced land values 150 years later. In the former railroad lands, modern values of improvements are lower by 23 percent, total property value by 4.5 percent, and population by 8 percent. The negative impacts occur primarily in counties with high rates of crop share agreements relative to other forms of tenancy, consistent with the classical literature that emphasized the negative incentive effects of share tenancy (Marshall 1946). I find little evidence for other explanations, including elite capture of political systems.

The geographic breadth of my data sources allows me to estimate the ideal land policy over a large portion of the frontier United States. My modern property data cover roughly 12 million properties spread over 380,000 square miles in six states, collectively worth about $2.7 trillion in 2017. Using my results and historical estimates of land clearing costs, I can compute land values under counterfactual policies. Applying recent advances in combinatorial optimization, I find that the ideal land policy would have increased the overall amount of land to small-scale homesteaders, particularly in productive lands which required high levels of complementary investments. Overall, I estimate that the optimal property rights allocation would have increased my sample's agricultural land values by $28 billion (4.8 percent) in 2017. This figure decreases only slightly if the government is constrained to give railroad companies roughly the same payout as it did historically. Thus, the American government could have realized most of the gains from an efficient land policy without needing an alternate source of funds for its industrialization.

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WHEN COERCIVE ECONOMIES FAIL: THE POLITICAL ECONOMY OF THE U.S. SOUTH AFTER THE BOLL WEEVIL

The second chapter, joint with James Feigenbaum and Soumyajit Mazumder, considers how disruptions to agriculture can have political economy impacts. Cotton cultivation formed the politics and institutions in the Jim Crow South, leading to many personal and civic restrictions on the lives of Black Americans. Beginning in the early 1900s, many African Americans thus chose to leave the South for other regions of the country, a movement known as The Great Migration. According to some historical accounts, this migration was accelerated by the boll weevil, a cotton pest that greatly harmed cotton farming (Lange, Olmstead, and Rhode 2009). From an econometric standpoint, this is a useful event to study, as the boll weevil's spread from its entry point near Brownsville, Texas, was primarily based on wind patterns and geographic distance rather than political or cultural factors (Ager, Brueckner, and Herz 2017).

How did the Jim Crow system respond to these shocks? We employ a difference-in-difference estimation strategy at the county level, making use of the boll weevil's spread throughout the cotton belt, 1892–1922. According to our results, once the boll weevil arrives in a typical county, the Black population begins to fall, ultimately becoming lower by about 5–25 percent, depending on specification. Simultaneously, anti-Black violence in the form of lynchings also falls, a drop equal to about 100 percent of the sample mean across the whole period.

We argue in the paper that these results imply African Americans retained a limited amount of political agency through their ability to "vote with their feet" against the excesses of Jim Crow, in keeping with Albert Hirschman's notions of "voice" and "exit." Worried at the prospect of losing a formerly captive labor force, white Southern planters used their considerable influence to moderate violence against African Americans, reducing one of the factors leading to migration.

Although our results are certainly more heartening than a plausible counterfactual in which violence increased in response to Black migration, in other respects, it highlights how limited the avenues for political expression were under Jim Crow. Voting with your feet is far more arduous than voting in a free election and while anti-Black violence decreased substantially, ultimately was an incremental change in a system that would still require decades of reform.

EVOLVING COMPARATIVE ADVANTAGE AND THE IMPACT OF CLIMATE CHANGE IN AGRICULTURAL MARKETS

The third chapter, joint with Arnaud Costinot and Dave Donaldson, studies the long run of the next century and how land use will be shaped by climate change. A large literature in economics and climate science has documented that a warming planet will significantly impact agricultural productivity worldwide. Many of these changes will be negative as already hot countries find it more difficult to grow in increasing temperatures. On the other hand, cold areas in other countries may become arable in the coming years. This paper aims to quantify the aggregate consequences of these micro-level shocks.

To approach this problem, we use micro-level data on potential crop yields from the FAO GAEZ project. The data report potential yields for a large number of crops in 1.7 million grid cells measuring around five kilometers on each side. Crucially, these

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data are reported both for current conditions and under a number of models of climate change. We combine these data with a structural model of demand and production, calibrating its parameters to baseline data on prices and output. We can compute counterfactual welfare, then, by simply replacing fields' productivity data with their estimated data under a climate change scenario and computing a new equilibrium.

Our results indicate a substantial negative impact on welfare from climate-driven changes to crop productivity, though with substantial heterogeneity by country. On net, welfare losses amount to about 15 percent of the GDP contribution of our modeled crops. However, the impact is actually positive in some countries like Russia, which will see its crop frontier expand. On the other hand, already warm countries in our sample like Malawi will face even more substantial losses. The impacts of climate change are mitigated substantially by the ability of farmers to adapt and change their crop choice, but they are only slightly mitigated by the ability of countries to trade with each other for crops they need.

Overall, my dissertation suggests a large role for land use in long-run development, both in economic and political arenas. As the world adapts to a changing climate, the importance of land will continue as part of the long-run development of the future.

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REFERENCES

Ager, Philipp, Markus Brueckner, and Benedikt Herz. "The Boll Weevil Plague and Its Effect on the Southern Agricultural Sector, 1889–1929." *Explorations in Economic History* 65 (2017): 94–105.

Allen, Robert C. "The Growth of Labor Productivity in Early Modern English Agriculture." *Explorations in Economic History* 25, no. 2 (1988): 117–46.

Cheung, Steven. *The Theory of Share Tenancy.* Chicago: University of Chicago Press, 1969.

Coase, Ronald H. "The Problem of Social Cost." *Journal of Law and Economics* III (1960): 1–44.

Dell, Melissa. "The Persistent Effects of Peru's Mining Mita." *Econometrica* 78, no. 6 (2010): 1863–903.

Hornbeck, Richard. "Barbed Wire: Property Rights and Agricultural Development." *Quarterly Journal of Economics* 125, no. 2 (2010): 767–810.

Hornbeck, Richard, and Suresh Naidu. "When the Levee Breaks: Black Migration and Economic Development in the American South." *American Economic Review* 104, no. 3 (2014): 963–90.

Jones, Maria, Florence Kondylis, John Ashton Loeser, and Jeremy Magruder. "Factor Market Failures and the Adoption of Irrigation in Rwanda." World Bank Policy Research Working Paper No. 9092, Washington, D.C., December 2019.

Lange, Fabian, Alan L. Olmstead, and Paul W. Rhode. "The Impact of the Boll Weevil, 1892–1932." *Journal of Economic History* 69 no. 3 (2009): 685–718.

Marshall, Alfred. *Principles of Economics*. New York, NY: Cosimo, Inc., 1946.

Olmstead, Alan L., and Paul W. Rhode. "Reshaping the Landscape: The Impact and Diffusion of the Tractor in American Agriculture, 1910–1960." *Journal of Economic History* 61, no. 3 (2001): 663–98.

Smith, Adam. *The Wealth of Nations*. London: W. Strahan and T. Cadell, 1776.

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Essays about Race, Discrimination, and Inequality

Growing inequality coupled with an enhanced understanding of how a child's neighborhood environment affects their life outcomes highlights the importance of understanding both how government policies shaped neighborhoods over time and the role that race played in the implementation of such policies.[1] As such, this dissertation seeks to understand the role of public policies in shaping long-run neighborhood outcomes, with a specific focus on understanding the relationship between private markets, government, and race at key points in American history. Chapter 1 provides an analysis of the federal urban renewal and slum clearance program enacted as part of the Housing Act of 1949. Chapter 2 provides an empirical analysis of redlining maps created by the Home Owners' Loan Corporation at the height of the Great Depression. Lastly, Chapter 3 documents a modern-day disparity in debt collection judgments across black and non-black neighborhoods.

THE LONG RUN IMPLICATIONS OF SLUM CLEARANCE

In my first chapter, titled "The Long-Run Implications of Slum Clearance: A Neighborhood Analysis," I theoretically and empirically analyze the federal urban renewal and slum clearance program. This program was established as part of the Housing Act of 1949 and became one of the largest and most controversial policies used to rehabilitate neighborhoods in the United States. The urban renewal and slum clearance program provided federal money to cities to demolish blighted urban areas, which were then redeveloped with locally planned urban renewal projects. The qualitative narrative surrounding this program is overwhelmingly negative in its assessment and highlights the controversies surrounding the program, focusing specifically on the displacement of black residents (e.g., Jacobs 1961; Anderson 1964). The previous quantitative analysis of this program has shown that cities with greater program participation saw positive and economically significant effects on income, property values, and the population at the city level (Collins and Shester 2013). However, a lack of systematic data collection of each project's location within a city has hindered researchers' ability to quantitatively analyze this program on a more granular geographic level.

I began my analysis by constructing a new dataset documenting the locations of approximately 200 urban renewal projects that were implemented between 1949 and 1965 across 28 large U.S. cities. I use this newly constructed dataset, along with decennial census data at the census tract level, to examine the characteristics of neighborhoods cleared for redevelopment and the effect that urban renewal projects had on neighborhoods over time. I find strong evidence that the program disproportionately targeted black neighborhoods for slum clearance. Conditional on experiencing urban blight, neighborhoods with an above-average share of black residents were two to three times more likely to be cleared and redeveloped as compared to white neighborhoods with similar observable characteristics. Further, redeveloped neighborhoods experienced a 12 percent decline in housing density and a 24 percent increase in median rents.

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[1] Such outcomes include a child's educational attainment, economic mobility, and longevity (e.g., Chetty et al. 2014; Chetty et al. 2016; Chetty and Hendren 2018).

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This change in the housing structure of redeveloped neighborhoods was associated with a 13 percent decline in population density, a 16 percent decline in the share of black residents, and an 18 percent increase in median incomes.

These results are consistent with predictions from a spatial equilibrium model of locational choice. This theoretical framework highlights the importance of spillover effects caused by clearing neighborhoods and redeveloping them with fewer, more expensive housing units. The theory suggests that displaced residents increased the demand for housing in other neighborhoods within an impacted city, ultimately putting upward pressure on housing costs in other areas of the city that were not directly redeveloped.

RACE, RISK, AND THE EMERGENCE OF FEDERAL REDLINING

Another way in which the federal government intervened in housing markets during the twentieth century is through the creation of the Home Owners' Loan Corporation (HOLC). HOLC was established as a response to the Great Depression to buy and refinance troubled home loans. After acquiring over one million loans, HOLC created a set of maps for every major city in the United States to summarize the spatial variation in the riskiness of mortgage lending in different neighborhoods. These maps, which were intended to help manage the risk associated with its newly acquired mortgage portfolio, had red lines around the riskiest neighborhoods.[2] Most black households were concentrated in the highest risk zones in these maps, and many formerly redlined neighborhoods remain economically distressed today. The HOLC maps, in conjunction with contemporaneous maps produced by the Federal Housing Agency (FHA), have become visual shorthand for government-sanctioned housing market discrimination and are at the center of modern debates regarding the long-run impacts of government-sponsored redlining on neighborhood segregation.

My second dissertation chapter (joint with Price Fishback, Allison Shertzer, and Randall Walsh), titled "Race, Risk, and the Emergence of Federal Redlining," provides a systematic empirical evaluation of the construction of redlining maps in the late 1930s. We assess to what extent the prevalence of black households in redlined neighborhoods stems from the underlying economic disadvantage faced by black individuals and families as opposed to racial discrimination in the construction of the maps themselves. We create a spatial dataset that combines data from individual households and neighborhoods for nine of the ten largest cities in the United States in 1930 and 1940 with digitized HOLC maps and survey information that accompanied each map. We use this data to perform various empirical exercises, including documenting how housing and economic characteristics varied across neighborhood risk ratings and exploring how these characteristics varied at the boundaries between differentially ranked neighborhoods. The maps appear to have accurately delineated neighborhoods on different trajectories that would have impacted lending risk over the long term.

We then perform a set of counterfactuals to eliminate any potentially discriminatory boundary placement. We find that racial bias in the construction of the HOLC maps can explain at most a small fraction of the observed concentration of black households in redlined zones. Instead, our results suggest that the majority of black households were redlined because decades of disadvantage and discrimination had already pushed them into the center of economically distressed neighborhoods prior to the government's

[2] The HOLC gave letter grades A, B, C, and D to neighborhoods with map colors of green, blue, yellow, and red, respectively.

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direct involvement in mortgage markets. We conclude that the HOLC maps are best viewed as providing clear evidence of how decades of unequal treatment effectively limited where black households lived in the 1930s, rather than reflecting racial bias in the construction of the maps themselves.

RACIAL DISPARITIES IN DEBT COLLECTION

Discrimination against black Americans in both private and public spheres has contributed to the segregated and unequal society we live in today. The distinct set of disadvantages experienced by black Americans increases their likelihood of experiencing negative financial shocks and decreases their ability to mitigate the impact of these shocks. My third dissertation chapter, titled "Racial Disparities in Debt Collection" (joint with Domonkos Vamossy), documents a disparity in debt collection judgments across black and non-black neighborhoods in the present day. Through the use of a novel dataset that links debt collection court cases from Missouri with information from Experian credit reports, we find that majority-black neighborhoods experience approximately 40 percent more judgments than non-majority-black neighborhoods, even after controlling for differences in median incomes, median credit scores, and default rates. The racial disparity in judgments cannot be explained by differences in debt characteristics across black and non-black neighborhoods, nor can it be explained by differences in attorney representation, the share of contested judgments, nor differences in neighborhood lending institutions. While we cannot fully disentangle the extent to which the remaining judgment gap is due to discrimination or other unobservable characteristics, back-of-the-envelope calculations suggest closing the racial wealth gap would simultaneously close the gap in debt collection judgments. This result highlights that even if no discrimination is currently present in the debt collection system, historic discrimination has contributed to the modern-day racial wealth gap and, therefore, still contributes to disparate outcomes across black and non-black neighborhoods today.

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REFERENCES

Anderson, Martin. *The Federal Bulldozer. A Critical Analysis of Urban Renewal, 1949–1962*. Cambridge, MA: The MIT University Press, 1964.

Chetty, Raj, and Nathaniel Hendren. "The Impacts of Neighborhoods on Intergenerational Mobility I: Childhood Exposure Effects." *Quarterly Journal of Economics* 133, no. 3 (2018): 1107–62.

Chetty, Raj, Nathaniel Hendren, Patrick Kline, and Emmanuel Saez. "Where Is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States." *Quarterly Journal of Economics* 129, no. 4 (2014): 1553–623.

Chetty, Raj, Michael Stepner, Sarah Abraham, Shelby Lin, et al. "The Association between Income and Life Expectancy in the United States, 2001–2014." *Jama* 315, no. 16 (2016): 1750–66.

Collins, William J., and Katharine L. Shester. "Slum Clearance and Urban Renewal in the United States." *American Economic Journal: Applied Economics* 5, no. 1 (2013): 239–73.

Jacobs, Jane. *The Death and Life of Great American Cities*. New York, NY: Random House, 1961.

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The Dissertations of Enrique Jorge-Sotelo, Adrien Montalbo, and Robin John Charles Adams 2020 Alexander Gerschenkron Prize Competition

Economic history is a multi-disciplinary academic field. It may be defined as the history of economic events and the economics of historical events. Any other definition denies the diversity of the profession and our output. Alexander Gerschenkron practiced both superbly. If the 15 dissertations submitted are taken for what is currently being achieved by our youngest scholars, economic history is in very good shape.

ENRIQUE JORGE-SOTELO

The objective of this thesis is to examine the performance of Spanish banking, monetary policy, and exchange rate policy during the Great Depression. Recent multinational histories of the Great Depression-era have suggested that Spain was able to ride out the Great Depression due to the policy flexibility provided by its floating exchange rate. Jorge-Sotelo is skeptical.

The story begins with a 1921 law intended to modernize Spanish banking affairs. The new law granted Spanish banks the ability to borrow money at the Bank of Spain using government bonds as collateral. Importantly, this borrowing ability was not limited.

With exchange rates stable or rising before 1927, there were few problems with this new arrangement. However, from 1927 onward, the exchange rate began to fall. Simply put, the Bank of Spain could not raise the discount rate to stabilize the exchange rate because the banks just substituted borrowing with public debt as collateral. With the exchange rate continuing to fall, several monetary interventions were a failure. In 1930, the government needed to raise its gold holdings to pay its international debts, and it issued a series of gold bonds. This led the Spanish banks to contract short-term debt in foreign markets to obtain foreign gold to buy the new Spanish gold bonds. This then exposed them to the April 1931 bank runs when the new Republic came to power.

For the period 1927q1 to 1932q3, Jorge-Sotelo digitalized a heretofore unused set of banking records giving bank quarterly assets and liabilities. A regression analysis shows that the discount rate had little effect on bank lending.

Moving ahead from these results, Jorge-Sotelo proposes that in this period, Spain should be considered an *emerging economy*. As an emerging economy, *regardless of the exchange rate regime*, when monetary policy in the main creditor country changes, room for policy independence in the emerging economy only comes when it imposes capital controls. In a regression testing, the allocation of Bank of Spain resources among six of the largest Spanish banks, the only variable that was significant was whether a bank had a history of borrowing from the Bank of Spain!

In the final chapter, Jorge-Sotelo examines why Spanish banking failures were limited to four banks. The answer is straightforward. *Banks were permitted to suspend their mark-to-market accounting during the crisis*, allowing the credit side of their accounts to remain publically in good shape and to keep publically known bank losses to a minimum. Second, *the banking authorities and the banks were absolutely silent about the depth of the banking crisis*. I have attended courses and seminars in monetary theory and history for 55 years. Not one course or seminar paper *focused* on the role of secrecy

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and dissimulation in monetary matters. The Bank of Spain during the Depression could not have been the only central bank before or since to use these tools. Perhaps Jorge-Sotelo should make more of this. In any case, economists beware! We will now be inundated with papers on the optimal level of secrecy and dishonesty.

This thesis is a major revision of the conventionally told story of Spain's Great Depression. As the Depression developed, Bank of Spain lending was limited. It was hamstrung by the 1921 law. In the crisis, the Bank of Spain lost lender-of-last-resort status and later had to resort to capital controls. Furthermore, its secret decisions were extremely important in containing bank instability. The key to the success of this thesis is Jorge Sotelo's very strong grasp of the operations of the Bank of Spain and the nation's private banks, backed by his excellent mobilization of new data and econometrics.

ADRIEN MONTALBO

Primary education is devoted to providing literacy, numeracy, and the inculcation of individual and social manners. The nineteenth century was crucial in spreading primary education to the French population. Across the same century, France was also undergoing a slow acceleration in its per capita output rate. Industrialization arose as a major force in this acceleration. Were there links between the growth of primary education and rising industrialism? Was their interaction causally one-way or two-ways?

French primary education from the French Revolution to the Guizot Law of 1833 was supported by parental fees or public investment. A striking feature of primary education in the post-Revolutionary period was that it remained largely concentrated in the regions to the north of the east-west St Milo-Geneva line. Prior research has suggested that the regional diversity was due to three factors: the large variance across regions in economic resources, population concentration, and the length of their previous history of primary education. Montalbo's important contribution is to establish that school institutional features also mattered, most importantly the difference between the private and public schools.

The Guizot Law of 1832 required that all municipalities with 500 inhabitants maintain a primary school. Fortunately, the law was accompanied by a recent survey of primary education in 22 departments and 8,129 municipalities. Of the municipalities, 59 percent had at least one primary school. The municipal coverage of the survey was incomplete, but every large region of France was covered. The survey collected data on school fees, salaries, accommodations, classrooms, municipal occupations and salaries, the number of subjects taught, and schooling years. What a treasure chest for any economic historian!

With regard to the effects of industrialization Montalbo's analysis of the Guizot Survey shows a clear relationship between a district's economic resources and municipal investment in primary schools. The districts with more economic resources were associated with lower fees to the parents. Lower fees were associated with greater enrollment, a good Smithian result. Municipally supported public schools were also associated with more highly qualified teachers, more classroom discipline, more subjects taught, and longer school years. In sum, municipal investment meant the students were learning more. It does seem to me that it would have been helpful if Montalbo had subjected his entire array of variables to factor analysis prior to his regressions. Factor analysis is a

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technique intended to be an improvement on eye-balling, which often comes with prior beliefs.

Montalbo then finds a strong positive impact of industrialization on primary education due to industrialization's positive effect on the tax base of local government. Local governments chose to spend the augmented revenue on primary school investments. Montalbo then draws on the heights of military recruits by the district to instrument the economic level of a municipality. He concludes that districts with a higher standard of living were also districts with higher enrollment rates, stronger concentrations of primary schools, and larger municipal grants. In a regression analysis, he finds height and the *presence* of factories each had a strong positive impact on the presence of primary schools. The share of Protestants in the population was also a strong positive variable; see Max Weber.

Economic historians producing new data must do the essential job of understanding *the social context of the data sources* as well as the surrounding economy. This thesis does an excellent job in these matters.

ROBIN JOHN CHARLES ADAMS

This thesis is a history of the financing of the Irish Republic's war of independence, which lasted from 1919 to1921. The war was led by a clandestine government, the Dail Areann, established by the Irish Nationalist parliamentarians who refused to seat themselves in London.

The first four chapters develop chronological narratives of the politics, organization, marketing, and subscribers of the Irish National Loan. The Dail limited any opportunism by creating a multi-level organization for reporting every subscriber transaction. The Sinn Fein, the IRA, and the Catholic church were used to build the structure for the fundraising. Fund marketing began with secret promotional meetings for the wealthy and loyalists. The smaller bond buyers were approached later with door-to-door solicitation and after Mass.

Chapter 4 is one of the most *original* chapters of the thesis, a demography of the secret subscribers to the National Loan. The subscriber's identity, address, and the amount of their subscription were noted in registers. Adams was able to locate registers in three constituencies. There were 409 other names found, making a total of 6,233 subscribers. The 1911 census of Ireland was searched, yielding 3,298 cross-referenced names, permitting description by age, literacy, religion, and occupation.

Examining these data, Adams found subscribers were more literate than others in their respective provinces. Adams performs probit marginal tests on the likelihood of giving or not giving and the amounts of the fund's subscribed. In the likelihood-of-giving regressions, the strongest marginal effects were from priests, shopkeepers, publicans, and farmers. In the amounts given, the first three had strong marginal effects. Participation in the pre-1919 fundraising produced strong positive marginal coefficients, as did the subscribers' use of the Irish language. Again, I think factor analysis of these data set would have been useful to tease out the hidden, often interesting correlates.

The total subscription to the Irish National Loan was quite large: 355,000 pounds. This compared favorably with the recent Anti-Conscription Fund of 1918, which gathered 250,000 pounds. Michael Collins, the Minister of Finance, specifically wanted

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large numbers of small subscribers to the Irish National Loan, and he appears to have gotten it. Of the 355,000 pounds raised nationally, 257,849 pounds were raised from those giving 1 to 5 pounds.

As with the Irish Loan, Adams' American chapters chronicle the politics, fundraising organization, marketing, and the characteristics of the subscribers. By 1915, before the Easter Rising, the Clan na Gail had created the Friends of Irish Freedom in the United States. With the creation of the Dail, the Friends of Irish Freedom immediately started an "Irish Victory Fund" in February 1919, successfully raising $1 million.

On 17 January 1920, the Dail campaign for its own 1st External Loan was launched with door-to-door marketing. Because transactions in post-dated bonds of an unrecognized government were questionable for American bankers, the Dail decided that the post-dated bonds would be sold as "bond contracts," convertible into bonds when the United States recognized the Irish Republic.

The total raised by the closing date of 14 October 1921 was $5,151,800. The total number of subscribers was 276,279. As with the Irish Loan, it was the little contributors who made the 1st External Loan a success in the United States. If one counts those who subscribed up to the $30 (6 pounds), 60 percent of the money was raised from 90 percent of the subscribers. Adams is well aware of previous funding efforts by the revolutionary forces in Hungary and the Confederate South. Strangely missing is some comment on any international support offered to the pre-1917 revolutionary forces in Russia and Poland.

If I have my sums correctly, the Irish Victory fund, the National Loan, and the External Loan totaled 1.6 million pounds, a significant amount when compared with the 397,000 pounds spent for the Royal Irish Constabulary and the Dublin Metropolitan Police. There cannot be many accounts of clandestine fundraising for a revolutionary independence party as thorough, scholarly, and interesting as this one.

In honor of Alexander Gerschenkron, a master of both narrative and quantitative economic history, the Gerschenkron prize goes to Robin Adams, who has crafted an original, interesting, and exhaustive history of the financing of the Irish Revolution of 1919 to 1921.

Michael Edelstein
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"Escaping" the Great Depression: Monetary Policy, Financial Crises and Banking in Spain, 1921–1935

The Spanish experience during the interwar period constitutes an important element of the collective effort to understand the role of monetary forces in the depth and international transmission of the Great Depression.[1] Conventional accounts hold that Spain "escaped" the Depression by remaining out of the gold standard. The literature consensus can be synthesized in three main ideas. First, Spain avoided the deflationary process that plagued countries on gold thanks to the rapid exchange rate depreciation that took place in 1928–1931. Second, when a banking crisis took place in the spring and summer of 1931, the operation of a gold-inconvertible currency provided with the monetary autonomy needed to conduct emergency liquidity injections to banks, something that was out of reach for countries on gold. Finally, and as a direct consequence of the previous two advantages, Spain avoided the large or widespread bank failures that plagued the United States and Europe during the 1930s. In a sense, therefore, Spain features in the literature as something more than just an exception, but as a feasible counterfactual for what could have been achieved by other countries if they had remained out of gold. This dissertation contributes to the historiography of the Great Depression by reassessing some of the main conclusions of the aforementioned literature's consensus on the Spanish experience. Using new archival data on bank balance sheets, central bank lending, interest rates, and a number of qualitative sources, I take a closer look at monetary and banking developments during the 1920s and 1930s, which causes a different picture to emerge.

Recent macro-finance literature on the global financial cycle and the limits to monetary autonomy in emerging market economies has highlighted the importance of the effects of financial flows on a global scale. Empirical work shows that emerging market economies face a dilemma—not the traditional Mundell-Fleming trilemma—which only allows them to choose between monetary policy autonomy and capital mobility, regardless of the exchange rate regime they operate. When international capital flows revert, achieving domestic monetary autonomy requires the introduction of capital controls.[2] In my dissertation, I argue that exchange rate depreciation granted by the gold-inconvertible peseta, while certainly helped avoid a deflationary spiral, imposed limitations on Spanish monetary autonomy. Therefore, the response to the 1931 financial crisis, while

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[1] See, for example, Choudhri and Kochin (1980), Tortella and Palafox (1984), Bernanke and James (1991), Eichengreen (1992), Temin (1989, 1993, 2008), or Grossman (1994). Garcia Ruiz (1993), on the contrary, pointed to liquidity issues, while Martin-Aceña (1985) documented the monetary contraction of the 1930s.

[2] See, among other more recent contributions, Rey (2015).

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operating in the right direction, was constrained by the evolution of the exchange rate and capital outflows, while the nature of the money market and political factors also played a defining role in the way monetary authorities dealt with the crisis.

This dissertation also calls for a reconsideration of the definition of a banking crisis. Recent research has emphasized the need to include so-called "quiet crises," that is, events in which no evident panic or widespread bank failures take place, but that have an impact on the real economy through the impairment of financial intermediation and credit creation.[3] I document the coexistence of relative bank stability—the absence of widespread or large bank failures—with the collapse of financial intermediation and bank lending in Spain; widespread bank failures were avoided thanks to changes in accounting regulations, but banks entered the 1930s with very large capital losses waiting to be realized. The dissertation contains four substantive chapters, which I summarize in the following sections.

INDIRECT DEBT MONETIZATION, CREDIT AND ASSET PRICE BOOMS, AND THE EXTERNAL CONSTRAINT

From 1921, a new banking law allowed Spanish banks to borrow from the Banco de España (BdE henceforth), at their initiative, and using public debt as collateral at rates set below the nominal yield of public debt. By legislating to improve the liquidity of the banking sector, the government introduced a system of indirect debt monetization that secured strong demand for government bonds in a moment of weak public finance.

As the foreign capital bonanza of the mid-1920s came to an end, and capital outflows accelerated from 1928,[4] Spanish banks continued to use this system of indirect debt monetization to expand lending and fuel a stock market boom. In the presence of a growing external constraint (capital outflows and widening current account deficits), this materialized in the rapid deterioration of the exchange rate. Attempts at foreign exchange stabilization conflicted with persistent fiscal imbalances that provided additional liquidity for the ongoing credit and asset price boom. In turn, this boom reinforced the current account deficit in the context of capital outflows. Against this backdrop, the fall of the peseta was inevitable, even if publicly decried by policymakers.

DILEMMA OR TRILEMMA? THE 1931 SPANISH FINANCIAL CRISIS[5]

The fall of the Spanish peseta between 1928 and 1931 was a fundamental factor underlying the growing discredit of the Primo de Rivera Dictatorship on the economic front (1923–1930) and contributed to the discontent with the demanded but long-protracted transition towards democracy. As a result, the April 1931 local elections witnessed a

[3] See, for a recent long-run take on the matter (Baron, Verner, and Xiong 2020).

[4] See Accominotti and Eichengreen (2016) for the role of capital flow reversals and sudden stops during the Great Depression.

[5] A revised version of this chapter is published in the *European Journal of Economic History* (Jorge-Sotelo 2020a).

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landslide victory of Republican parties, and masses took the streets to proclaim the Second Spanish Republic. Despite attempts by the Provisional Republican Government to calm down bank depositors, the banking system lost 20 percent of its retail deposits between April and September 1931.

Banks turned to the discount window of the BdE for emergency liquidity while the fall of the peseta and capital flight accelerated. Developments in foreign exchange markets exposed the banking sector to growing currency and maturity mismatches; banks had incurred short-term debt denominated in foreign exchange (gold-convertible currencies) to purchase gold bonds issued by the Dictatorship in early 1930, as part of one of the failed interventions to stop the fall of the peseta. This caused monetary authorities' options to boil down to a dilemma when the rapid flight from the peseta prevented the expansion of the monetary base to provide liquidity for the banking sector, and a credit crunch ensued. A month and a half into the crisis, the provisional Minister of Finance authorized a large increase in the fiduciary component of the monetary base at the same time that closed the capital account. Only then, the BdE was unconstrained to act as lender of last resort. I find that banks that suffered liquidity shortages contracted lending, while the rest continued to lend, showing that demand for credit remained strong during the crisis. However, aggregate lending collapsed by more than 20 percent. Rather than alleviating it, exchange rate depreciation contributed to worsening the impact of the banking crisis.

BAGEHOT ON HOLIDAY: THE ALLOCATION OF LIMITED EMERGENCY LIQUIDITY[6]

Successful lender of last resort interventions depend crucially on the extent to which there is a balance of payments constraint and on the ability of banks and the central bank to maintain the liquidity of whatever is deemed as—or becomes during the crisis—"good," eligible collateral. External constraints influence the potential size and boldness of the intervention and might justify the need of raising interest rates to optimize the allocation of limited liquidity.[7]

While the previous chapter focused on the limitations imposed by an external constraint, this chapter shows that the absence of a clear and widely shared definition of "good" collateral and the reluctance to raise interest rates affected the allocation of limited emergency liquidity among Spanish banks. As the price of public bonds and private stocks fell during the crisis, borrowing on them as collateral became more expensive, and selling bills of exchange to the BdE provided extra liquidity to some banks. Until capital controls were in place, banks competed for central bank money, and early borrowers crowded out other banks from the discount window. This helps explain the contraction of credit at the bank level for the largest six banks in Spain, which accounts for the lion's share of emergency liquidity provision during the crisis.

[6] A revised version of the appendix of this chapter is available in First View at the *Revista de Historia Económica / Journal of Iberian and Latin American Economic History* (Jorge-Sotelo 2020b).

[7] The classic reference is Bagehot (1873), but see Ugolini (2017) for a discussion of more recent contributions on the rationale for raising interest rates under fiscal and/or external constraints.

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A QUIET BUT DEEP CRISIS: EXPLAINING BANKING STABILITY IN 1930s SPAIN

The last chapter deals with the puzzling stability of the Spanish banking sector during the 1930s, which I explain by documenting changes in accounting standards, namely the suspension of mark-to-market asset valuation. Following the collapse of the stock market in 1931, banks were allowed to close their 1931 books (and for subsequent years) reflecting 1930 asset prices.[8] I calculate a counterfactual estimate of the value of banks' portfolios and the concomitant capital losses if portfolios are marked to market. This calculation shows very large protracted capital losses, pushing many banks to inevitable failure.

Finally, the complete silence and successful secrecy on the incidence of the crisis at the bank level by all policymakers also contributed to keeping the crisis "quiet." These policy moves avoided a round of insolvencies caused by the fast and persistent fall of the stock market and widespread panic. However, they did not avoid the collapse in credit creation and financial intermediation and the sharp contraction in economic activity.[9]

CONCLUSION

By looking at monetary and banking developments in Spain during the 1920s and 1930s, this thesis highlights the importance of emerging economies' exposure to developments in international capital markets and how this exposure interacts with ongoing domestic macroeconomic and political instability and limits the policy reaction to financial crises, even in the context of floating exchange rates. External imbalances and capital flow reversals from 1928 feature essentially at the onset of the Great Depression; while foreign capital inflows during the 1920s relaxed Spain's external constraints, these reverted from 1928, and the peseta began to fall rapidly. This limited monetary authorities' reaction to the financial crisis of 1931; despite the policy reaction went in the right direction, a credit crunch ensued, and financial intermediation collapsed. Spain avoided large and widespread bank failures during the 1930s, but it was not because it did not have a banking crisis. A change in accounting standards that postponed a round of bank insolvencies and the complete secrecy about the actual scope of the crisis at the bank level helped contain the panic, but this could not reignite financial intermediation, and economic activity contracted sharply. While not denying other structural and political factors that were certainly at play, this thesis contributes to understanding the monetary and financial side of Spain's fragile entry into the 1930s and questions the validity of the Spanish experience as a counterfactual for other countries' policy options during the Great Depression.

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[8] The 1929 Wall Street Crash did not have a strong impact on the Spanish stock market, and asset prices remained relatively high during 1930.

[9] Recent estimates put the contraction of economic activity and financial intermediation in Spain in a comparative perspective. Prados de la Escosura's (2017) estimates of GDP per capita between 1929 and 1933 show that the contraction was similar to the one experienced by France, Italy, Belgium, and not too far from Germany. Higher frequency estimates of economic activity provided by Albers (2018) reinforce this idea, while Eichengreen and Mitchener (2003) show the drop in financial intermediation in Spain is comparable to the one experienced by the United States or Germany.

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REFERENCES

Accominotti, Olivier, and Barry Eichengreen. "The Mother of All Sudden Stops: Capital Flows and Reversals in Europe, 1919–1932." *Economic History Review* 69*,* no. 2 (2016): 469–92.

Albers, Thilo N.H. "The Prelude and Global Impact of the Great Depression: Evidence from a New Macroeconomic Dataset." *Explorations in Economic History* 70 (2018): 150–63.

Bagehot, Walter. *Lombard Street: A Description of the Money Market.* New York, NY: Scribner, Armstrong & Co. and Wiley Investment Classics (1999 edition), 1873.

Baron, Matthew, Emil Verner, and Wei Xiong. "Banking Crises without Panics." NBER Working Paper No. 26908, Cambridge, MA, March 2020.

Bernanke, Ben, and Harold James. "The Gold Standard, Deflation, and Financial Crisis in the Great Depression: An International Comparison." In *Financial Markets and Financial Crises*, edited by R.G. Hubbard. Chicago, IL: University of Chicago Press, 1991.

Choudhri, Ehsan U., and Levis Kochin. "The Exchange Rate and the International Transmission of Business Cycle Disturbances: Some Evidence from the Great Depression." *Journal of Money, Credit, and Banking* 12, no. 4 (1980): 565–74.

Eichengreen, Barry. *Golden Fetters: The Gold Standard and the Great Depression, 1919–1939*. Oxford: Oxford University Press, 1992.

Eichengreen, Barry, and Kris J. Mitchener. "The Great Depression as a Credit Boom Gone Wrong." BIS Working Paper No. 137*,* Bank of International Settlements, Basel, Switzerland, September 2003.

García Ruiz, José Luis. "Banca y crisis económica en España, 1930–1935: Un nuevo enfoque." *Revista de Historia Económica / Journal of Iberian and Latin American Economic History* 11, no. 3 (1993): 595–620.

Grossman, Richard. "The Shoe That Didn't Drop: Explaining Banking Stability during the Great Depression." *Journal of Economic History* 54, no. 3 (1994): 654–82.

Jorge-Sotelo, Enrique. "The Limits to Lender of Last Resort Interventions in Emerging Economies: Evidence from the Gold Standard and the Great Depression in Spain." *European Review of Economic History* 24, no. 1 (2020a): 98–133.

———. "The Impact of the First World War on the Spanish Money Market: New Evidence from Money Market and Bank Lending Interest Rates, 1900–1935." *Revista De Historia Económica / Journal of Iberian and Latin American Economic History*, 2020b. doi:10.1017/S0212610920000154.

Martin-Aceña, Pablo. "*La política monetaria en España, 1919–1935."* Madrid, Spain: Instituto de Estudios Fiscales, 1985.

Prados de la Escosura, Leandro. "*Spanish Economic Growth, 1850–2015.*" London: Palgrave Studies in Economic History, Palgrave Macmillan, 2017.

Rey, Hélène. "Dilemma, not Trilemma: The Global Financial Cycle and Monetary Policy Independence." NBER Working Paper No. 21162, Cambridge, MA, May 2015.

Temin, Peter. "*Lessons from the Great Depression.*" Cambridge, MA: MIT Press, 1989.

———. "Transmission of the Great Depression." *Journal of Economic Perspectives* 7, no. 2 (1993): 87–102.

———. "The German Crisis of 1931: Evidence and Tradition." *Cliometrica* 2 (2008): 5–17.

Tortella, Gabriel, and Jordi Palafox. "Banking and Industry in Spain, 1918–1936." *Journal of European Economic History* 13, no. 2 (1984): 81–111.

Ugolini, Stefano. *The Evolution of Central Banking: Theory and History*." London: Palgrave Studies in Economic History, Palgrave Macmillan, 2017.

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Primary Education, Industrial Activities and Economic Growth in Nineteenth-Century France

FIRST CHAPTER

The first part of this thesis is dedicated to understanding primary schooling development in France. I focus on the period going from the Revolution to the Guizot Law of 1833. However, as the spatial distribution of education remained stable in France until at least the mid-nineteenth century, the conclusions drawn from the analysis have a longer scope. In this first chapter, I look at the institutional factors that contributed to increasing the stability of primary schools' presence and enhancing human capital accumulation in France.

I study the way primary education was operating from the Revolution to the Guizot Law in the absence of any law regulating primary instruction. The Revolution abolished taxes collected by the clergy, which were used to finance primary education. From this period of time to 1833, schools could be private and only financed by fees paid by families or public and financed by a mix between schooling fees and municipal subsidies.

I show that, after the Revolution, municipal authorities took over the control of instruction in richer and growing areas. Education was, therefore, more often publicly subsidized in these areas, and its financing burden was shared by all inhabitants through taxation. This had a crucial impact on primary instruction as municipal investment contributed to decreasing the level of schooling fees. The lower cost of education made schooling affordable for more families and was associated with higher enrollment rates. Also, I find that teaching conditions were better and human capital accumulation higher in the schools provided with municipal grants. Pupils stayed for a longer number of years in public schools and were learning more subjects than in the private ones.

Public investment in primary schooling is, therefore, a key element to understand the uneven distribution of schools, enrollment rates, and knowledge accumulation in France during the nineteenth century. This chapter adds to the existing literature on the determinants of educational expansion by showing that the organization of the schooling system may highly impact enrollment rates and human capital accumulation.[1] Understanding the national or local institutional features of schooling systems appears, therefore, to be essential in accounting for the expansion of education during the nineteenth century.

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[1] Democratic transition is another factor put forward in the literature (Glaeser, Ponzetto, and Shleifer 2007). The second phase of industrialization impacted positively education thanks to increased complementarity between formal skills and industrial tasks (Franck and Galor 2017; Diebolt, Le Chapelain, and Menard 2021). Inequality in land distribution, however, decreased both the presence of institutions promoting human capital (Banerjee and Iyer 2005; Galor, Moav, and Vollrath 2009) and private demand for education (Beltrán Tapia and Martinez-Galarraga 2018; Cinnirella and Hornung, 2016). Religious factors were also relevant, as Protestantism positively influenced education (Becker and Woessmann 2009).

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SECOND CHAPTER

In the second chapter of the thesis, I analyze the impact of industrial activities on primary instruction in early nineteenth-century France. To do so, I rely on the industrial survey of 1839–1847, which reports the location and characteristics of all manufactures in France at that time. I study the impact of industrial activities both on primary schools' presence and on enrollment rates.

By using the location of mineral deposits as an instrument for industrial activities, I first find a positive effect of factories' presence on the location of primary schools. This impact was due to an increase in the supply of schools financed by municipalities. Indeed, industrial activities contributed directly to municipal resources through the *patente*, a tax collected on industrial production. As a result, municipalities where this production was high, were benefiting from higher economic resources coming from taxation.

However, I find no significant association between industry and the accumulation of human capital. I show that the presence of industry was not significantly linked with enrollment rates, while mining activities were negatively influencing this enrollment. I provide indications that this negative association was likely to be due to the employment of children within factories. Indeed, there was a negative correlation between the presence of industrial sectors relying highly on child work in a given municipality, textile and building in particular, and the enrollment within primary schools. Finally, I find no significant impact of industry on the number of schooling years. The presence of factories was therefore not associated with a higher volume of knowledge learned within primary schools.

This work sheds new light on the relation between industry and education during the first phase of industrialization.[2] Industrial activities influenced positively the supply of schools through an income effect but had at best no impact on the demand for schooling. Therefore, elementary knowledge and skills acquired within primary schools appear to have been unrelated to industrial production, at least in the first part of the nineteenth century.

THIRD CHAPTER

The third chapter focuses on the association between primary schooling and economic development in nineteenth-century France and until WWI. To do so, I collected data on the economic resources of municipalities from publications by the Ministry of the Interior entitled *La Situation Financière des Communes de France et de l'Algérie*. These publications provide detailed information on the amount of taxes collected by municipalities, which I digitalized for the 1881 and 1911 years.

[2] It has been argued that the progressive introduction of large-scale factories was skill-saving, diminishing the demand for instruction and literacy rate (de Pleijt 2018). This was especially true if steam engines were favoring the use of machines on which children were performing secondary tasks in assisting older workers (Nardinelli 1980) and came under the name of the "deskilling hypothesis" (Sanderson 1972). However, in the case of France, there seems to have been a complementarity between technology and human capital (Franck and Galor 2017; Diebolt, Le Chapelain, and Menard 2017).

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In order to assess if education contributed significantly or not to development at the local level, I take the average number of schooling years within municipalities alongside enrollment rates as indicators of educational achievement. I also investigate the relationship between schooling quality, proxied by the municipal investment in primary schools and the associated improved working conditions for teachers, and the level of future resources.

Firstly, I use the fact that the Guizot Law made it mandatory for any municipality with more than 500 inhabitants to open a primary school for boys. Therefore, I use a regression discontinuity around the 500-inhabitant threshold for municipalities with no schools in 1833. I find a positive and significant effect of being just above the legal threshold on future resources, with a magnitude of around one-third of a standard deviation in resources.

Secondly, I instrument primary education by the proximity of municipalities to printing presses established from 1450 to 1500. Indeed, numerous qualitative evidence links the development of literacy and the advent of the printing press. This strategy indicates that one more schooling year in 1833 was related to an increase of around 15 percent in the economic resources per capita of municipalities at the end of the century. A 1-percent increase in enrollment was associated with a 0.4 percent increase in resources. Primary schooling was, therefore, an important factor behind the growth of municipalities during the nineteenth century in France.

Finally, using a matching estimation technique, I find that schooling quality also mattered for the future development of municipalities with similar education achievement. Teachers' qualification level seems, on the contrary, not to have mattered in this perspective.

This chapter sheds new light on the relation between education and economic development during the century of industrialization and modernization.[3] In this chapter, I show that primary schooling and basic education contributed to the growth of municipalities during this century in France, and therefore that their influence on technology adoption and productivity is very likely to have been strong at that time.

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REFERENCES

Allen, Robert C. "Progress and Poverty in Early Modern Europe." *Economic History Review* 56, no. 3 (2003): 403–43.

Banerjee, Abhijit, and Lakshmi Iyer. "History, Institutions, and Economic Performance: The Legacy of Colonial Land Tenure Systems in India." *American Economic Review* 95, no. 4 (2005): 1190–213.

[3] In the British case, literacy has been deemed useless to perform the vast majority of occupational tasks in the mid-nineteenth century (Mitch 1993) and irrelevant to explain growth at the country level (Allen 2003). More recent studies, however, found that primary education was the main driver of growth in Britain until the mid-eighteenth century (Madsen and Murtin 2017). Upper-tail knowledge has also been associated with pre-industrial economic growth (Baten and van Zanden 2008; Squicciarini and Voigtländer 2015). Average education was also related to the industrial development of Prussia during the nineteenth century (Becker, Hornung, and Woessmann 2011; Cinnirella and Streb 2017).

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Baten, Jörg, and Jan Luiten van Zanden. "Book Production and the Onset of Modern Economic Growth." *Journal of Economic Growth* 13, no. 3 (2008): 217–35.

Becker, Sascha O., Erik Hornung, and Ludger Woessmann. "Education and Catch-up in the Industrial Revolution." *American Economic Journal: Macroeconomics* 3, no. 3 (2011): 92–126.

Becker, Sascha O., and Ludger Woessmann. "Was Weber Wrong? A Human Capital Theory of Protestant Economic History." *Quarterly Journal of Economics* 124, no. 2 (2009): 531–96.

Beltrán Tapia, Francisco J., and Julio Martinez-Galarraga. "Inequality and Education in Pre-Industrial Economies: Evidence from Spain." *Explorations in Economic History* 69 (2018): 81–101.

Cinnirella, Francesco, and Erik Hornung. "Landownership Concentration and the Expansion of Education." *Journal of Development Economics* 121 (2016): 135–52.

Cinnirella, Francesco, and Jochen Streb. "The Role of Human Capital and Innovation in Economic Development: Evidence from Post-Malthusian Prussia." *Journal of Economic Growth* 22, no. 2 (2017): 193–227.

de Pleijt, Alexandra M. "Human Capital Formation in the Long Run: Evidence from Average Years of Schooling in England, 1300–1900." *Cliometrica* 12 (2018): 99–126.

Diebolt, Claude, Charlotte Le Chapelain, and Audrey-Rose Menard. "Industrialization as a Deskilling Process? Steam Engines and Human Capital in XIXth Century France." BETA Working Paper No. 07-17, Strasbourg Cedex, France, 2017.

———. "Neither the Elite, nor the Mass. The Rise of Intermediate Human Capital during the French Industrialization Process." *Cliometrica* 15 (2021): 167–202.

Franck, Raphaël, and Oded Galor. "Technology-Skill Complementarity in the Early Phase of industrialization." NBER Working Paper No. 23197, Cambridge, MA, February 2017.

Galor, Oded, Omer Moav, and Dietrich Vollrath. "Inequality in Land Ownership, the Emergence of Human Capital Promoting Institutions, and the Great Divergence." *Review of Economic Studies* 73, no. 1 (2009): 143–79.

Glaeser, Edward L., Giacomo A. M. Ponzetto, and Andrei Shleifer. "Why Does Democracy Need Education?" *Journal of Economic Growth* 12 (2007): 77–99.

Madsen, Jakob B., and Fabrice Murtin. "British Economic Growth since 1270: The Role of Education." *Journal of Economic Growth* 22, no. 3 (2017): 229–72.

Mitch, D. "The Role of Human Capital in the First Industrial Revolution." In *The British Industrial Revolution: An Economic Perspective,* edited by Joel Mokyr, 267–307. New York and London: Routledge, Taylor & Francis Group, 1993.

Nardinelli, Clark. "Child Labor and the Factory Acts." *Journal of Economic History* 40, no. 4 (1980): 739–55.

Sanderson, Michael. "Literacy and Social Mobility in the Industrial Revolution in England." *Past and Present* 56, no. 1 (1972): 75–104.

Squicciarini, Mara P., and Nico Voigtländer. "Human Capital and Industrialization: Evidence from the Age of Enlightenment." *Quarterly Journal of Economics* 30, no. 4 (2015): 1825–83.

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Shadow of a Taxman: How, and by whom, was the Republican Government financed in the Irish War of Independence (1919–1921)?

Sean O'Casey's play *Shadow of a Gunman* was the first major work of fiction based on the Irish War of Independence, 1919–1921. Understandably, the historiography of this pivotal period in Irish and British history has focused on the romantic armed struggle personified in O'Casey's eponymous gunman. As a result, a shadow has fallen over the financial side of the Irish War of Independence, leaving it neglected by historians and largely unknown to the wider world.[1] The story of the gunman has been told and retold. But the question of who paid for the gun has remained unanswered. The revolution had to be funded, however. Without requisite funds, the fight could not have been won. How it was funded is the focus of this thesis.

The organization at the center of this thesis is Dáil Éireann, the underground Irish republican government established by representatives of the radical nationalist Sinn Féin party, following its landslide victory in the 1918 U.K. general election. The Dáil held its first session in January 1919, and on the same day, two policemen were shot dead. The organization responsible for this attack was the Irish Volunteers, a nationalist paramilitary group that was loosely under the command of the Dáil. This incident is generally regarded as having opened the Irish War of Independence, a widespread insurrection with between 1,200 and 1,500 fatalities, many more casualties, and substantial property damage. On one side were the Irish Volunteers, also known as the IRA, and on the other were the forces of the British government in Ireland.[2]

The Dáil selected a cabinet from its representatives—with ministries including Defence, Finance, and Foreign Affairs forming what Arthur Mitchell has termed a "counter-state."[3] At first, this counter-state had neither international recognition nor territorial integrity, but as the war progressed, it took on more and more of the characteristics of a legitimate government. Eager to project itself as such, the illegal and underground Dáil cabinet decided to seek funding *via* the issue of war bonds. Issued in 1919, 1920, and 1921, these bonds promised a return to subscribers, only when British forces had left Ireland and the independent Irish Republic was internationally recognized. Through these bond certificates, known as the National Loan and External Loans, the Dáil raised £371,849 from 140,000 subscribers in Ireland and nearly $6m (*ca*. £1.5m) from 300,000 in America.[4]

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[1] Notable exceptions include Carroll (2002), Lainer-Vos (2013), and Ridley (2018). O'Sullivan Greene (2020) was published after the submission of the thesis. None investigate the identities of the subscribers.

[2] Hopkinson (2002, p. 26).

[3] Mitchell (1995).

[4] Carroll (2002, pp. 9, 15).

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This thesis aims to shed light on how the Dáil's funds were solicited, collected, transmitted, and safeguarded, as well as on who subscribed and what might have influenced their subscriptions. In so doing, it makes three broad contributions to the historiography of the Irish War of Independence. First and foremost, it gives a comprehensive overview of the financing of Dáil Éireann. Although crucial to understanding the war, this has received scant attention in historiography. Second, by focusing on fundraising, this thesis internationalizes a war that has too often been treated primarily in a domestic context. Thus, it adds to a small but growing historiography on the role of the diaspora in the Irish revolutionary period.[5] Finally, by focusing on subscribers, it explores the role of civilian non-combatants in determining the outcome of the conflict, yielding fresh insights into popular support for Irish independence on the eve of its realization. This thesis also makes contributions beyond the historiography of Ireland. By giving a rare account of the financing of a guerrilla war, it adds to the historiography of war finance, which has typically concentrated on conventional wars between established states. It also contributes to our knowledge of the new nation states that emerged in Europe following WWI.

A recurring theme running through this thesis is the nexus of money and power. Although largely overlooked by the historiography, access to funds was crucial in shaping the balance of power within and between organizations throughout the Irish War of Independence. The Dáil's ability to exert authority over Sinn Féin and the IRA, its bargaining power with the various Irish-American organizations, and finally in negotiations with the British government, were all contingent on establishing and maintaining control of the purse strings. This control would be worthless, of course, were it not for the thousands of Irish, Irish-Americans, and other supporters who were willing to empty their pockets in support of Irish independence. This thesis is arranged chronologically but, to allow the appropriate level of analysis of these dynamics, some concurrent events are treated separately. Thus, it is divided into two sections. Section I explores the Dáil's fundraising in Ireland, while Section II covers its funds collected overseas. It is composed of 11 chapters and proceeds as follows.

Chapter 1 briefly introduces the National Loan, placing it in the context of previous nationalist fundraising in Ireland. Chapter 2 explores the organizational structure that underpinned the National Loan campaign, highlighting how it strengthened the Dáil's authority over Sinn Féin and the IRA. At the same time, it sets out the archival material left behind by the National Loan's bureaucracy. Chapter 3 introduces the National Loan's potential subscribers and explores how the loan was promoted. It also shows how, by provoking the British government, the loan was instrumentalized as a driver of public sentiment.

Chapter 4 turns to the results of the National Loan and, using previously unknown archival material, investigates the identities of its subscribers. It draws primarily on three National Loan registers, one found in an archive and two in the hands of a private collector. These registers list the names, addresses, and subscriptions of 1,605 subscribers in South Monaghan, 2,927 in Longford, and 1,210 in East Tipperary.[6] The

[5] For example, Doorley (2005), Brundage (2016), Schmuhl (2016), Nyhan-Grey (2016), Keogh (2016), and Murray (2018).

[6] UCD Archives, Bernard O'Rouke papers, P117/68, *South Monaghan NL Register*; Maura Ní Riada Private Collection (hereafter MNR), 1, *Longford NL Register*; *East Tipperary NL Register*, MNR/2/A.

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registers were supplemented by 178 National Loan receipts for the parish of Doneraile, Co. Cork, and the names and addresses of 313 subscribers from across the country mentioned in Dáil debates.[7] The combination of these five sources is a unique dataset containing the names and addresses of 6,233 subscribers to the National Loan. It was possible to positively identify 3,298 (52.9 percent) of the subscribers in the 1911 census of Ireland, unlocking information on their age, literacy, religion, and occupation. Further details were gleaned by cross-referencing with police intelligence reports, county directories, newspaper reports, previous fundraising lists, published and unpublished memoirs, and the testimonies of IRA veterans in their witness statements and pension applications.[8]

The picture that emerges is a nuanced representation of public opinion at the time, confirming some elements of the historiography while challenging others. In contrast to the image of the youthful revolutionary, the subscribers were overwhelmingly middle-aged, with 48 years as the median. Not surprisingly, the vast majority of subscribers were Catholic, although a significant number of Protestant subscribers could be identified in Longford. Only 12 percent of subscribers were women, ranging from 9 percent in Longford to 21 percent in the more urban East Tipperary. The majority (74 percent) of subscribers were farmers, more so than the general population (44 percent). Catholic priests were also overrepresented among the subscribers and were associated with the largest subscriptions. Publicans were associated with large subscriptions as well, as were shopkeepers. Subscribing to previous nationalist fundraising campaigns, in support of moderate nationalism in 1913, more extreme nationalism in 1916, and in opposition to the imposition of conscription in 1918, all increased likelihood of subscribing to the National Loan. Linking cultural nationalism with support for independence, those residents of South Monaghan who filled out their 1911 census return in the Irish language could be expected to make subscriptions that were 9 percent larger than those who did not.[9]

Section II begins with Chapter 5, which gives a history of Irish nationalist fundraising in America from 1820 to 1920. In so doing, it introduces the particular dynamics that determined the bargaining position of Irish nationalists in Ireland relative to Irish-American organizations in the United States. Chapter 6 introduces the key personalities of Dáil's First External Loan and the organizational landscape in which it was promoted. Its promotion is covered in Chapter 7, with a particular focus on the Dáil's efforts to be seen as the legitimate government of Ireland, strengthening its bargaining position with the Irish-American leadership. Chapter 8 looks at the internal dynamics of the External Loan organization and how the Dáil mission vied with the Irish-American leadership for control of Irish nationalist fundraising in America.

In Chapter 9, attention is paid to the subscribers to the First External Loan, combining a previously unknown register containing the names and addresses of 1,582 subscribers

[7] Cork City & County Archives, Seamus Fitzgerald Papers, PR6/70/2/180; *DÉ debates on DÉ Loans and Funds Bill*, 20 Jun. 1928, 11 Oct. 1928, 6 Mar. 1929, 1 May 1929, 29 May 1929, 12 Jun. 1929, 20 Jun. 1929, 7 Nov. 1929, 5 Mar. 1930, 9 Apr. 1930, 14 May 1930, 4 Jun. 1930, 10 Dec. 1930, 18 Mar. 1931, 25 Mar. 1931, 27 May 1931, 21 Oct. 1931.

[8] For example, TNA: CO 904/108-11; Thom's Directory 1921; National Library of Ireland, Ms.3,110, *Solemn covenant to resist Conscription, 21 Apr. 1918*; O'Malley (2007); Monaghan County Museum, 1986/5N1, *Interviews with IRA veterans*; Bureau of Military History (hereafter BMH), WS, *Witness Statements*; BMH/MA, *IRA military pension applications.*

[9] Controlling for relevant variables in each case.

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in Manhattan with the U.S. Census of 1920 and qualitative material from around the country. Subscribers to the External Loan came from 44 U.S. states, but the Irish-American heartlands of New York (26 percent) and Massachusetts (20 percent) dominated. The subscribers were overwhelmingly working-class, with 76 percent subscribing to the lowest possible denomination ($10). Similarly, 28 percent of subscribers in Manhattan were employed in manual labor and 17 percent in domestic service. Some 40 percent were women. The median age of subscribers in Manhattan was just 36, and only 37 percent were married, the remainder either single (58 percent) or widowed (5 percent). The majority were either renters (62 percent) or boarders (17 percent), with 18 percent living with their employers. Some 71 percent were Irish-born, with a further 17 percent second-generation Irish-Americans. Interestingly, the median year of immigration to the United States was 1904, well before the radicalization of public opinion in Ireland. The sample also included other ethnicities. Belgian, Finnish, German, Hungarian, and Swedish sympathizers were found among the subscribers, as well as African-Americans, Chinese, and Russian Jews. Overall, the picture that emerges is of one of young, single immigrants in precarious living conditions; whose income was spent on rent or whose accommodation was dependent on their employer. Despite the precariousness of their position, they chose to spend some of their income on the cause of Irish independence.[10]

Chapter 10 focuses on Dáil's Second External Loan, relating it to developments in Ireland and the Anglo-Irish peace talks in London. Bringing together several strands of the thesis, it looks at the role of fundraising in determining the bargaining power of individuals within the Dáil, between the Dáil and the Irish-Americans, the Dáil and the IRA, and the Dáil and the British government, all of which was contingent on the Dáil's relationship with American opinion. Finally, Chapter 11 looks to the rest of the world. It surveys the Dáil's abortive attempts to raise funds outside Ireland and the United States and focuses on Argentina, where a bond drive was launched but prematurely terminated with the signing of the Anglo-Irish Treaty.

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REFERENCES

Brundage, David. *Irish Nationalists in America: The Politics of Exile 1798–1998.* Oxford: Oxford University Press, 2016.

Carroll, Francis M. *Money for Ireland: Finance, Diplomacy, Politics, and the First Dail Éireann Loans, 1919–1936.* Westport, CT: Praeger Publishers, 2002.

Doorley, Michael. *Irish-American Diaspora Nationalism: The Friends of Irish Freedom, 1916–35.* Dublin: Four Courts Press, 2005.

Hopkinson, Michael. *The Irish War of Independence.* Montreal: McGill-Queen's University Press, 2002.

Keogh, Dermot. *La Independencia de Irlanda: La Conexión Argentina.* Buenos Aires: Ediciones Universidad del Salvador 2016.

Lainer-Vos, Daniel. *Sinews of the Nation: Constructing Irish and Zionist Bonds in the United States.* Malden, MA: Polity Press, 2013.

[10] National Archives of Ireland, DE/EXL/Vol.80, *Manhattan subscriber list*; 1920 Federal U.S. Census.

https://doi.org/10.1017/S0022050721000206 Published online by Cambridge University Press

Mitchell, Arthur. *Revolutionary Government in Ireland: Dáil Éireann 1919–1922.* Dublin: Gill and Macmillan, 1995.

Murray, Damien. *Irish Nationalists in Boston: Catholicism and Conflict, 1900–1928.* Washington, DC: The Catholic University of America Press, 2018.

Nyhan-Grey, Miriam (ed.). *Ireland's Allies: America and the 1916 Easter Rising.* Dublin: University College Dublin Press, 2016.

O'Malley, Ernest. *Rising Out.* Chicago: University of Chicago Press, 2007.

O'Sullivan Greene, Patrick. *Crowd Funding the Revolution.* Dublin: Eastwood Books, an imprint of the Wordwell Group, 2020.

Ridley, Nicholas. *Michael Collins and the Financing of Violent Political Struggle.* Milton Park, Oxfordshire, UK: Routledge, Taylor & Francis Group, 2018.

Schmuhl, Robert. *Ireland's Exiled Children: America and the Easter Rising.* Oxford: Oxford University Press, 2016.

https://doi.org/10.1017/S0022050721000206 Published online by Cambridge University Press