

Introduction:

Simon Kuznets, Cautious Empiricist of the Eastern European Jewish Diaspora

The construction of hypotheses is a creative act of inspiration, intuition, invention; its essence is the vision of something new in familiar material. The process must be discussed in psychological, not logical, categories; studied in autobiographies and biographies, not treatises on scientific method; and promoted by maxim and example, not syllogism or theorem.

Milton Friedman, "The Methodology of Positive Economics"

The announcement, in September 1971, that Simon Smith Kuznets (April 30, 1901 - July 9, 1985) was to receive the third Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel surprised no one¹ in the economics community. Kuznets built the system of national income accounting that allows accurate measurement of national product. Over the course of his more than half a century of service to the profession, Kuznets laid much of the foundation of modern development economics by providing the first comprehensive analysis of international growth data from developing countries. His research also made substantive contributions to the study of economic development, emphasizing the links between inequality and economic growth and highlighting important distinctions, not understood at the time, between today's underdeveloped countries and the state of today's rich countries before industrialization. He also pioneered, jointly with Milton Friedman, the foundational concepts of human capital and lifetime income.

Yet there is another side of Simon Kuznets less familiar to his colleagues, which this book highlights. Despite being one of the most distinguished American economists,

¹ A possible exception was Wassily Leontief, who upon hearing that a Russian economist was to be announced to have won the Nobel Prize prepared to make a statement.

Kuznets was actually born to a family of well-off Jewish bankers and furriers in Pinsk (formerly in Russia, now in Belarus) and grew up in what is now Ukraine before immigrating via Poland to the United States. Astonishingly, given that his impact on the methodology of economics rivals that of the much-acclaimed economists Kenneth Arrow and Paul Samuelson, there has been hardly any scholarship on Kuznets's life and thought. The few that have studied him see his background as little more than a preamble to his scholarly work.² Yet, as I argue below, Kuznets's identity and past, and his attempt to understand them quantitatively through the empirical study of the Eastern European Jewish Diaspora, were central to his understanding of economic development. The standard neglect of Kuznets's background, and of him entirely, is not altogether surprising, however, given that Kuznets labored assiduously to maintain a wall of separation between the two facets of his life. The same cautious empirical methodology that has made Kuznets a challenging subject for historians of economics also hid the personal motivation behind the studies to which he applied it. The secular cosmopolitan life he built for his family obscured his Eastern European³ Jewish ancestry. A universalistic commitment to empirical rigor and appropriate subjects of economic inquiry protected from the economics community his abiding fascination with his past.

My window on Kuznets is therefore his writing about and relation to the history and economics of the Jews. These works are collected for the first time in these volumes. Some of them have been previously published, two of them even in their complete form and in English. Many of the most interesting works were unpublished, published only in Hebrew

² See, for example, Fogel, Robert W. 1987. Some Notes on the Scientific Methods of Simon Kuznets; Fogel, Robert W. 2000. Simon S. Kuznets: April 30, 1901-July 9, 1985; Kapuria-Foreman and Perlman 1995; Abramovitz, Moses. 1986; Simon Kuznets, 1901-1985. *Journal of Economic History* 46 (1):241--246.

³ To avoid Russian chauvinism, I use the term "Eastern European" to broadly refer to the entirety of the Russian imperialist-Jewish pale. However, it should be noted that Kuznets in his work, along with many others at the time, did not respect such contemporary distinctions and typically refers to what I call Eastern European Jewry as simply Russian Jewry.

or scattered so broadly as to obscure the corpus they represent. Once assembled, even the fairly superficial inspection effected by this introduction demonstrates their close connection to the innovative ideas he brought to early development economics.

In “Economic Structure and the Life of the Jews”, Kuznets builds a model of the path of Jewish inequality closely resembling that in his celebrated Presidential Address to the American Economic Association, published in 1955. Beyond the similarity in the formal approach of these two pieces, his substantive claims about the inverted-U shape of income inequality among Jews parallel his broader “Kuznets curve” hypothesis about economic development and income inequality. Thus, Kuznets’s path-breaking work, perhaps the first to take seriously the relationship between development and inequality, seems inextricable from his coincident work on the economic history of the Jews. In fact, it seems likely that the severe inequality among Jews that Kuznets documents quantitatively in later work⁴ and saw throughout his life, along with its connection to the economic history of the Jews, played a key role in motivating his focus on distribution.

The influence of Kuznets’s past extends to his emphasis, late in his career, on the role of culture, institutions and context in economic development. His views, now fairly widely accepted, were initially highly controversial coming against the backdrop of the linear, materialistic and universalistic theories of development prevalent at the time, such as those of Paul Rosenstein-Rodan, Arthur Lewis, Raul Prebisch and W. W. Rostow. The turn away from purely measurable economic factors and toward these “softer” considerations begins with, and may well have been driven by, his early study of Jewish economic history, as well as the course of his own multicultural life.

⁴ Kuznets, Simon S. 1972. Economic Growth of U.S. Jewry. *Papers of Simon Smith Kuznets, 1923-1985 (inclusive), 1950-1980 (bulk), Correspondence and other papers relating to Jewish studies, ca.1959-1977*, Box 1, in folder \em Economic Structure of U.S. Jewry. Call Number: HUGFP88.25.

Population, and the promises and threats it posed for development, was one of the last themes Kuznets took up in the late 60's and 70's. As a firm, if always balanced, opponent of neo-Malthusian hysteria about population, Kuznets clearly echoes his earlier arguments about the contributions (especially Jewish) immigrants made to the American economy. I would suggest that Kuznets saw in the “population bombers” repeats of the anti-immigrant hysteria that helped halt the wave of Eastern European Jewish immigration that had carried him to America. In his work on the “Israel’s Economic Development”, which appears in English translation for the first time in second volume of these works, Kuznets sees that nation’s ideological embrace of immigrants as the lifeblood of that nation’s exceptionally rapid economic growth.

A final connection between Kuznets’s economics and his background is the most speculative, but perhaps most exciting as well. In the 1940’s Kuznets wrote one of his last major works of pure data assembly on income flows jointly with Milton Friedman, *Income from Independent Professional Practice*. This work made an important step beyond data collection, wading deep into controversy that almost sunk the book’s publication by arguing that medical licensure acted to raise doctor’s wages by limiting competition. The book also pioneered the methodology of human capital accounting.

The former is striking given Kuznets’s interest in the role of Jewish employment restrictions in spurring emigration and his singular unpublished⁵ writing on “The Doctrine of Usury in the Middle Ages”. Human capital, on the other hand, clearly plays a prominent role in Kuznets’s work beginning with his study of Jewish educational patterns and his concurrent work on income inequality. While his work with Friedman is sufficiently rote

⁵ I believe I am the first to discover this writing in the course of my research for this paper. I owe a tremendous debt to Stephanie Lo, co-editor of this volume, for transcribing it in a legible form that made it possible for me to review it in detail. So other scholars may have the same benefit, this article is available at <http://www.glenweyl.com>, given that it is not directly relevant to this volume.

and technically empirical that it is difficult to decipher with any certainty either the motivations that led to the study or conclusions drawn from it, it again seems unlikely that here, its thematic association with the struggles of Eastern European Jews is an accident.

In fact, this opacity of Kuznets's substantive views on economics as well as their motivation are the rule, not the exception, in his work in all fields, as I discuss in the penultimate section of this introduction. Ever the consummate student of his advisor, Wesley Clair Mitchell, Kuznets was the ultimate cautious empiricist, offering caveat upon caveat throughout his career for even the modest hypotheses he dared to venture. This careful positivist attempt to separate facts from conjecture was but one manifestation of a broader set of dualities in his life and work. Never did he reveal in his work the motivation leading him to it and almost never did he show the broader conclusions that might be drawn from it. In fact, whenever motivation was too apparent, as in his work on Jewish economic history, he did his best to conceal his work from his economics colleagues. Despite his status as a first generation Eastern European immigrant and his passionate identification with the state of Israel, he made every effort to raise his children as any other secular, mainstream, native-born American. Thus, Kuznets poses something of an enigma: motivated and inspired by understanding his past, he assiduously labored for universalism, both methodologically through empiricism and culturally through Americanism.

Yet while Kuznets's story may superficially seem paradoxical, precisely what makes it so interesting, and of at least some broader significance, is how it parallels the broader story of Jews of Eastern European descent in American economics. Jews rose more in economics than in any other academic discipline during the twentieth century, soaring from total

exclusion to dominance of the field. As Derek Penslar⁶ argues, while (especially Eastern European) Jews were well integrated into the natural sciences, they had been long excluded from the mainstream of European political and social affairs. The political events of the late 19th and early 20th centuries (emancipation, immigration and anti-Semitism) gave American Jews a socio-political voice and motivation for the first time. This process paralleled, and often intertwined with, the transformation of economics into a quantitative science. I conclude with the speculation that this unique intersection of technical skill, reinforced by traditional separation from Gentile social affairs, and fresh political motivation, which Kuznets typified, may have ideally suited the Eastern European Jewish Diaspora to transform contemporary economics. Obviously, this is a mere conjecture, drawn largely from a single anecdote, but it potentially offers an important avenue for future research.

The Life of a Scholar

Little is known⁷ about the history of the Kuznets family. The name, which means “blacksmith” in Russian, is thought to have been adopted only a few generations before the family’s migration to the United States and designed to conceal⁸ the family's Jewish background in a culture where few Jews were in fact blacksmiths.⁹ Despite their name, Kuznets’s father was a banker.¹⁰ Pinsk, where Kuznets spent his childhood and attended primary school, was immortalized in Chaim Weizmann's autobiography as a hotbed of Zionist youth activism.¹¹ At the age of nine or ten, Kuznets’s family moved to Rovno in the

⁶ Penslar, Derek J. 2001. *Shylock's Children: Economics and Jewish Identity in Modern Europe*. Berkeley and Los Angeles: University of California Press; pp. 56-7.

⁷ In several places, which I flag, secondary sources disagree on the sequence, and sometimes substances, of events. I have done my best to reconcile the sources, privileging those whose authors are more confident of their facts or closer to the actual events, such as family members.

⁸ In fact, Simon was the only member of the family who maintained his name upon arriving in the United States; the rest of the family adopted the anglicized “Smith” (Britannica, Encyclopedia. *Kuznets, Simon* 2007).

⁹ Kuznets, Paul. *Personal Interview: May 3* 2007.

¹⁰ Stein, Judith. 2010. Personal Communication, February 10, 2010.

¹¹ Weizmann, Chaim. 1949. *Trial and Error: The Autobiography of Chaim Weizmann*. New York: Harper; pp. 16-28.

Ukraine¹² to live with his mother's family, who were well-off furriers.¹³ There he was raised in a combination of Russian from his mother and aunt and Yiddish from his grandparents.¹⁴ While his primary scholastic interests were secular, rather than Talmudic, Kuznets received training in Judaism and Jewish history.¹⁵ After the Jewish expulsion from Ukraine during the Great War, Kuznets moved to Kharkov for his secondary education at the *gymnasium* and university.¹⁶ His education spanned from Kharkov High School #2, from October 1916 to May 1917, to the Commercial Institute of Kharkov, from 1918 to July 1921.¹⁷ In Kharkov, Kuznets was exposed to the Bundist school of Jewish, anti-zionist Marxism,¹⁸ though his interest in and reaction to these influences are far from clear and do not clearly manifest in his later work..

Around the time of his move to Kharkov, his father and older brother left for the United States through Turkey, while he stayed behind with his mother and younger brother.¹⁹ Because his mother was an invalid,²⁰ the remaining brothers were hesitant to follow their father. However, Kharkov University shut down with the onset of Civil War in Russia following the revolution of October 1917 and Kuznets briefly took up a position as a section head at the bureau of labor statistics in the Ukraine. In 1921 the family was, with

¹² Hauptman, Ruth Kuznets Pearson. *Personal Communication: February 6* 2010.

¹³ Stein, Judith. 2010. Personal Communication, February 10, 2010.

¹⁴ Hauptman, Ruth Kuznets Pearson. *Personal Communication: February 6* 2010.

¹⁵ Kapuria-Foreman and Perlman (1995. An Economic Historian's Economist: Remembering Simon Kuznets. *The Economic Journal* 105 (433):1524--1547) and Fogel (2000. Simon S. Kuznets: April 30, 1901-July 9, 1985) disagree about whether Kuznets attended primary school in Kharkov or Pinsk. I privilege the Kapuria-Foreman and Perlman (1995) account as the authors cite a personal interview. Indeed, Stein (2009. Personal Correspondence with Vladimir M. Moskovkin) points to a memoir that Kuznets's niece wrote to deduce that the family moved from Pinsk to Kharkov when Kuznets was 14 years old.

¹⁶ Fogel, Robert W. 2000. Simon S. Kuznets: April 30, 1901-July 9, 1985; p. 1.

¹⁷ Stein, Judith. 2009. Personal Correspondence with Vladimir M. Moskovkin.

¹⁸ Kapuria-Foreman, Vibha, and Mark Perlman. 1995. An Economic Historian's Economist: Remembering Simon Kuznets. *The Economic Journal* 105 (433):1524--1547.

¹⁹ How and through where his brother and father left for the United States are not exactly clear, but this was the best I was able to piece together from various secondary accounts. See Britannica, Encyclopedia. *Kuznets, Simon* 2007 and Kapuria-Foreman, Vibha, and Mark Perlman. 1995. An Economic Historian's Economist: Remembering Simon Kuznets. *The Economic Journal* 105 (433):1524--1547

²⁰ Kuznets, Paul. *Personal Interview: May 3* 2007.

many other Jews, deported back to Poland. Simon was briefly arrested for a reason that is not clear from available accounts, persuading the rest of family to join their father in the United States.²¹ His mother, who for years had been suffering from symptoms resembling multiple sclerosis, died on the way to the West in Warsaw and the family eventually left through Dantzig.²²

Kuznets arrived in New York in 1922 and his life²³ as known to the economics community began. Within two years he had received his B.A. and M.A. and after two further years of research he was awarded a Ph.D. in 1926 under the supervision of Wesley Clair Mitchell.²⁴ Mitchell, the founder of the National Bureau of Economic Research, was undoubtedly the greatest intellectual influence on Kuznets's career. In fact, he was the only economist Kuznets explicitly thanked in his Nobel Prize autobiography, saying that he "owe(d Mitchell) a great intellectual debt".²⁵ In collaboration with and under the guidance of Mitchell, Kuznets began his early career by investigating empirical regularities in macroeconomic data in a series of books. First, his *Cyclical Fluctuations* investigated cyclical variation in retail commerce.²⁶ In *Secular Movements in Production and Prices*, Kuznets discovered for the first time the so-called "long" or "Kuznets" cycle, a low-frequency (fifteen to twenty year), low-amplitude fluctuation in economic activity previously unknown to researchers.²⁷ Finally, Kuznets completed the trilogy by considering extremely high-

²¹ Hauptman, Ruth Kuznets Pearson. *Personal Communication: February 6* 2010.

²² Kuznets, Paul. *Personal Interview: May 3* 2007.

Hauptman, Ruth Kuznets Pearson. *Personal Communication: February 6* 2010.

²³ I do not provide a comprehensive biography of Kuznets's career, as its relevance to the contents of these volumes is limited. Instead, I aim here to provide an outline with emphasis on the aspects of his life most relevant to the connection between his thinking and his Eastern European Jewish heritage. For a more complete intellectual biography, see Kapuria-Foreman and Perlman (1995. An Economic Historian's Economist: Remembering Simon Kuznets. *The Economic Journal* 105 (433):1524--1547).

²⁴ Fogel, Robert W. 2000. Simon S. Kuznets: April 30, 1901-July 9, 1985.

²⁵ Kuznets, Simon S. *Autobiography* 1971.

²⁶ Kuznets, Simon S. 1926. *Cyclical Fluctuations*: New York: National Bureau of Economic Research.

²⁷ Kuznets, Simon S. 1930. *Secular Movements in Production and Prices: Their Nature and Their Bearing Upon Cyclical Fluctuations*: Boston: Houghton Mifflin.

frequency seasonal movements in manufacturing output in *Seasonal Variations in Industry and Trade*.²⁸

While working on his trilogy, Kuznets met and then married his wife, Russian-Canadian Jewish Edith Handler, in 1929.²⁹ They lived and had two children, Paul and Judith, in the dominantly Gentile Upper West Side.³⁰ Reinforcing this spatial divide from his past, Kuznets raised his children in a strictly secular, American manner, never attending synagogue and providing them no education in Russian language or culture. Nonetheless, Kuznets maintained a firm personal interest in Russian affairs, as a strong opponent of the Soviet Union, and was seen by his colleagues as something of an amateur expert on the Soviet economy. He also was an avid consumer of emerging Soviet literature, particularly dissident literature, perhaps building on the education in Russian literature his mother and aunt instilled in him.³¹ Despite this private interest in Russia, his encounters with Soviet economists left him with the impression that they were more political apparatchiks than social scientists and he engaged in little scholarly dialogue with Russian academics. Furthermore, none of his interest in Russian culture and affairs filtered into his relationship to his wife or children. In addition to the strict line he drew between his past and the family life he was creating, Kuznets divided his personal and professional lives equally stringently, almost never discussing work at home or with friends outside the field. He had many such friends; though they were mostly academics, they were drawn from a variety of fields: psychology, philosophy, sociology, public affairs, religion and art.³²

²⁸ Kuznets, Simon S. 1933. *Seasonal Variations in Industry and Trade*: New York: National Bureau of Economic Research.

²⁹ Ibid., p. 1.

³⁰ Stein, Judith. 2010. Personal Communication, February 10, 2010.

³¹ Hauptman, Ruth Kuznets Pearson. *Personal Communication: February 6* 2010.

³² Kuznets, Paul. *Personal Interview: May 3* 2007.

The process of studying data on economic aggregates seems to have persuaded Kuznets that the available information was insufficient to supply the rigor and broad scope economists demanded. Kuznets therefore set out during the 1930's to build a system of comprehensive accounting for productive activity at the national level. His basic insight and approach, familiar to any student who has taken an introductory macroeconomics class, was to measure a nation's productive output by the income it generated. Kuznets set out to comprehensively measure income from all sources within the United States; the framework he developed was eventually applied across the world and forms the basis of modern methods of measuring national product.³³ After rapid success in this ambitious project, Kuznets moved on to measure other, more detailed forms of income. In collaboration with Milton Friedman,³⁴ he began the work discussed extensively in the *Work with Milton Friedman* section below. During World War II, Kuznets applied his talent for aggregate accounting and statistical analysis to explore the limits of American productive capacity. His analysis helped impose discipline on a political process that demanded far more in service of the war effort than the U.S. economy was capable of turning out.³⁵

After the war, Kuznets and his family moved from New York to Philadelphia, where since the early 1930's Kuznets had been commuting to teach at the University of Pennsylvania. When it came time to find a house in Philadelphia, Kuznets reversed course and placed the family in an overwhelmingly Jewish suburb north of the city. The war's end brought other changes. As news of the Holocaust horrors spread throughout the United States, Kuznets, like other American Jews, was deeply shaken. He greeted the founding of

³³ Kapuria-Foreman, Vibha, and Mark Perlman. 1995. An Economic Historian's Economist: Remembering Simon Kuznets. *The Economic Journal* 105 (433):1524-1547; pp. 1529-33.

³⁴ Friedman, Milton, and Simon S. Kuznets. 1945. *Income from Independent Professional Practice*: New York: National Bureau of Economic Research.

³⁵ Kapuria-Foreman, Vibha, and Mark Perlman. 1995. An Economic Historian's Economist: Remembering Simon Kuznets. *The Economic Journal* 105 (433):1524-1547; pp. 1534-5.

the state of Israel with enthusiasm. Almost immediately, Kuznets began to make nearly annual trips to the holy land, meeting with and assisting the nation's nascent economic policy elite and eventually becoming a primary force behind the founding of the Maurice Falk Institute for Economic Research in Israel, which remains a primary locus for economic research in the Jewish state.³⁶

The end of the Second World War also brought a shift in Kuznets's attention to what he described as "a wider view, using national income estimates and their components to compare the performance of countries in different parts of the world on an international scale."³⁷ This interest led him to write a series of ten articles under the titles "Quantitative Aspects of the Economic Growth of Nations," published in *Economic Development and Cultural Change* between 1956 and 1967. This set of articles formed the basis for Kuznets's most famous book, *Modern Economic Growth*, published in 1966. Yet, the most cited article of Kuznets's whole career, which emerged from his work on economic growth, was not actually a developed piece of research; rather, it was a hypothesis about the relationship between economic growth and income inequality that he debuted in his address³⁸ to the American Economic Association as President in 1955.

As his interest shifted from income to development, Kuznets twice changed universities. He left Pennsylvania in 1954 for six years in Baltimore at Johns Hopkins before spending the last decade of his career at Harvard University. His last major work focused on the relationship between population, demographics and economic development. The connections between this work and his immigrant past are perhaps obvious and were first discussed by Kapuria-Foreman and Perlman.

³⁶ Kuznets, Paul. *Personal Interview: May 3 2007*.

³⁷ Kuznets in statements transcribed by Fogel (1987, 34).

³⁸ Kuznets, Simon S. 1955. Economic Growth and Income Inequality. *The American Economic Review* 45 (1):1-28.

After winning the Nobel Prize in 1971, Kuznets retired from Harvard and his career entered a new phase. He was in constant demand to lecture around the world and under no pressure to produce cutting edge research; the mathematicization of economic theory and the increasing availability of empirical data eroded the importance of Kuznets's comparative advantages in the field. While he continued to write, he began to explore various areas of economics that had previously been shut out by his drive to address quantitatively the crucial questions of economic development. First, he began, after a long career of sole authorship, to collaborate more closely and more often with his colleagues. Second, he further developed his interest in Jewish history (discussed extensively below), which had lain dormant since his influential “Economic Structure and Life of the Jews” was published in 1960. Finally, he increasingly wrote broader articles, addressed more to methodology, survey and interpretation than to original empirical analysis.³⁹

As he entered the final stage of his life, he also increasingly took advantage of the nearly unlimited opportunities he had to travel. The frequency of his trips to Israel increased, especially with the Falk Institute he helped found flourishing. Despite all this, he remained extraordinarily productive until health intervened: from 1980-1982 he published twelve articles. Then, after three years of struggling with Parkinson’s disease, Simon Kuznets died on July 8, 1985.

The Development of Development Economics

“Development Economics”, the branch of the discipline concerned with poor nations, is a young sub-field, even in a comparatively young discipline. As late as the early 1930’s, most citizens of the developed world, even economists, did not understand that much of the world's population lived in relative poverty, essentially outside the system of

³⁹ Kuznets, Edith, Robert W. Fogel, Marilyn Coopersmith, and Kathleen McCauley. 1989. Bibliography of Simon Kuznets. *Economic Development, the Family and Income Distribution*, 439-460.

industrial capitalism. Despite pervasive rhetoric about the “barbarism” or “lack of civilization” of colonized regions, Bardhan⁴⁰ argues that it was not until the development (by Kuznets) of national income accounting that it became possible to quantify the vast differences in material wellbeing between the developed and developing worlds.

Following Colin Clark’s⁴¹ seminal publication of systematic quantitative evidence of the “economic underdevelopment” in many parts of the world, there were a number of prominent “big theories” of development. Paul Rosenstein-Rodan⁴² argued that industrialization is only profitable when undertaken simultaneously by many industries and thus requires a “big push” to succeed. Kurt Mandelbaum⁴³ attempted, with little success, to apply demand side Keynesian theory to explain underdevelopment. Raúl Prebisch⁴⁴ pointed to colonial legacy trade patterns that victimized developing nations, while W. Arthur Lewis⁴⁵ emphasized the misallocation of labor supply to the rural, rather than industrial, sector. Robert Solow⁴⁶ proposed an influential mathematical theory of economic growth in which poor nations were poor because of a lack of capital and technology. Perhaps most infamously, W. W. Rostow⁴⁷ argued that developing nations simply needed to position their economies as currently developed nations had been when they developed to begin a “take-off” to sustained economic growth through a series of “linear stages”.

⁴⁰ Bardhan, Pranab. 1993. Economics of Development and the Development of Economics. *Journal of Economic Perspectives* 7 (2):129-142; p. 130.

⁴¹ Clark, Colin. 1939. *The Conditions of Economic Progress*: London: MacMillan.

⁴² Rosenstein-Rodan, Paul N. 1943. Problems of Industrialisation of Eastern and Southeastern Europe. *Economic Journal* 53 (210-211):202-211.

⁴³ Mandelbaum, Kurt. 1945. *Industrialisation of Backward Areas*: Oxford: Oxford University Press.

⁴⁴ Economic Commission for Latin America, United Nations, and Raúl Prebisch. 1950. *The Economic Development of Latin America and Its Principal Problems*: United Nations Department of Economic Affairs.

⁴⁵ Lewis, W. Arthur. 1954. Economic Development with Unlimited Supply of Labour. *The Manchester School* 22 (2):139-91.

⁴⁶ Solow, Robert M. 1956. A Contribution to the Theory of Economic Growth. *Quarterly Journal of Economics* 70 (1):65-94.

⁴⁷ Rostow, Walt W. 1960. *The Stages of Economic Growth: A Non-communist Manifesto*: Cambridge, UK: Cambridge University Press.

All these theories had at least two important broad features in common, which Kuznets called into question. First, all focused overwhelmingly on the aggregate problem of industrialization and growth, rather than on the effects of policies on, or through, their within-country distributions. Second, all viewed currently developing countries as following roughly the same growth trajectory (sharing the same production function, in Solow's terms) today as developed countries had followed in the past. While they disagreed about the causes of development, all believed in a universal recipe that had worked in the past for currently wealthy nations and would work in the future for currently underdeveloped nations. The following section discusses how insights Kuznets drew from his understanding and study of the Eastern European Jewish Diaspora led him to challenge the first of these views, while the section after it discusses the second.

Jewish Inequality and the Kuznets Curve

Economic inequality has proved a severe and persistent feature of the economic life of Jews, especially those of Eastern European descent, for at least the last century and a half. As Kuznets argues on page ??? of his seminal 1975 article "Immigration of Russian Jews to the United States: Background and Structure," which is reproduced in our second volume, the combination of legal discrimination and urbanity likely combined to create enormous inequality within the Jewish community between a wealthy commercial and financial elite and the dislocated and discriminated-against masses. In fact, extreme inequality due to professional insecurity among European Jews was bemoaned as early as 1793 by prominent Jewish enlightenment (*maskilim*) intellectual David Friedländer in his classic *Akten-stücke, die*

*Reform jüdischen Kolonien in den Preussischen Staaten betreffend*⁴⁸ and has long been seen as the source of the paradox in anti-Semitism that Jews have been viewed both as exploitative economic overlords and detestable paupers.

Kuznets argues that this inequality may have played an important role in the emigration of Eastern European Jews in two ways. First, inequality within the Jewish community may have reinforced prejudices within the non-Jewish population both in creating resentment of Jewish wealth and disdain for Jewish poverty, a theme that Penslar also picks up. Second, the dislocation and low economic position of much of the Jewish population, particularly when contrasted to the wealthy community elite, may have created a strong desire among some for selective migration to countries such as the United States with broader opportunity. While not discounting the role of Jewish persecution in Eastern Europe in spurring emigration, he argues that much of the differential Jewish migration may be attributable to greater Jewish urbanity and therefore greater exposure to dislocation and inequality associated with early stages of industrialization.

While quantifying the extent of these differential rates of wealth disparity is nearly impossible given the lack of data, Kuznets documents in the 1972 manuscript “Economic Growth of U.S. Jewry,” which appears in print for the first time on page ??? of this volume, that this trend has persisted, if not steepened, after Jewish immigration to the United States. He shows that while Jewish median income is only 10-20% higher than that of urban American Gentiles, mean income is almost twice that of the reference group, which suggests far greater Jewish inequality. Dramatic inequalities between impoverished newly arrived immigrants and wealthy established American Jewry, documented by Kuznets in his 1960

⁴⁸ Penslar, Derek J. 2001. *Shylock's Children: Economics and Jewish Identity in Modern Europe*. Berkeley and Los Angeles: University of California Press.

“Economic Structure and the Life of the Jews,”⁴⁹ were followed, after acculturation, by the wide cleavages of income between and within the professions (almost universally well-educated) Jews chose. Inequality among Jews is made all the more potent by the relative cultural segregation of Jews, which led to close contact among Jews of different classes. These inequalities were not merely an engaging subject for academic study in Kuznets’s life, but of pressing personal relevance. From the inequality between wealthy Jewish professional and lower middle class academic friends⁵⁰ to that surrounding him in his life in New York,⁵¹ inequality among Jews appeared at all stages of his life. One can only speculate that the view down from the wealthy heights of his youth in Pinsk and Kharkov⁵² fit the rough patterns described in his academic work.

Thus, it should not be surprising that income inequality became a central theme of Kuznets’s understanding of both the economic structure of Jews and the development of economies. The latter theme is perhaps the most widely known of Kuznets’s contributions to economics. In his 1954 Presidential Address to the American Economic Association, Kuznets argued that the evolution of income inequality and its relationship to economic growth should be central to the study of economic development. He also laid out a hypothesis about the nature of this relationship, which remains influential to this day, despite having been recently falsified even in the countries Kuznets studied with the advent of richer data.⁵³ His basic theory was that income inequality should first rise and then fall as a country developed economically. His reasoning ran roughly as follows: an industrializing country

⁴⁹ Kuznets, Simon S. 1960. Economic Structure and Life of the Jews. *The Jews: their History, Culture and Religion*, 1597-1666; pp. 1621-3.

⁵⁰ This was described to me by his son Paul Kuznets in 2007 in a personal interview.

⁵¹ Fogel, Robert W. 2000. Simon S. Kuznets: April 30, 1901-July 9, 1985.

⁵² Kuznets, Paul. *Personal Interview: May 3* 2007.

⁵³ Atkinson, Tony, Thomas Piketty, and Emmanuel Saez. 2009. Top Incomes in the Long Run of History.

may be seen as being divided, à la Lewis,⁵⁴ into two broad sectors, one urban and industrial; the other rural, communal, and agricultural. Economic development involves the transfer of population from the second sector into the first. Given the greater inequality of outcomes and uncertainty in urban life, at least the initial stages of this move were sure to exacerbate the divide between rich and poor, even as they spurred the nation's overall economic development. Furthermore, the increasing wealth of the urban sector relative to the rural sector and the accumulation of savings by this capitalist sector exacerbate inequality.

However, countervailing forces emerge as the process of development proceeds. First, the continued thrust of industrialization eventually erases differences of income between urban and rural sectors, as increased mobility and labor market efficiency demand the equalization of wages for comparable work. Second, the increasing availability of education, social welfare, and other government services demanded by urban masses eventually spread economic opportunity widely, holding down early entrepreneurial profits through competition and expanding the range of people to whom the most attractive economic opportunities are available. Finally, the process of development is largely one of capital accumulation and with such accumulation comes decreasing returns to capital; in fact, in most standard economic models, the share of national income accruing to capital is constant as capital accumulates. Workers, who now have more machines to use, see the returns to human capital rise. Given increasing mass education, human capital is more equitably spread than physical capital. Therefore, wages rise and economic inequality eventually declines.

Much less well-known are Kuznets's closely related theories of inequality among Jewish Eastern European migrants. In an early working draft of "Economic Structure,"

⁵⁴ Lewis, W. Arthur. 1954. Economic Development with Unlimited Supply of Labour. *The Manchester School* 22 (2):139-91.

edited and published for the first time in this volume, Kuznets lays out what might be termed the “immigrant Kuznets Curve” hypothesis on pages 111-112. He argues that inequality within an immigrant population should first increase and then fall as that community develops economically within its destination country. His reasoning is that immigrants are likely to rise economically as they become accustomed to the economic conditions and culture of a country. So long as a steady stream of migration continues, inequality will arise between the wealthier migrants who have spent longer in the country and the poorer new arrivals. However, if migration tapers or ceases, inequality will abate as all members of the arrived group equilibrate to their natural income in the new country. Note that this reasoning largely parallels Kuznets’s argument for the inverted U in the inequality-development relationship: the initial waves of migration to the city bring inequality between urban and rural areas and as the migration becomes complete, this inequality disappears.

This connection is further reinforced by the modeling exercises Kuznets used to quantitatively analyze these two parallel hypotheses. A core feature⁵⁵ of “Economic Growth and Income Inequality” is a toy model Kuznets builds that explores the possibility that the moving of population into a wealthier but more unequal sector might first generate and then reduce income inequality, under different assumptions about the relative income of the sectors. In the early version of “Economic Structure” in this volume, Kuznets includes a similar exercise (p. 112) where he explores the effects of changing distribution of migrants among cohorts over time on the patterns of intra-Jewish inequality, under different assumptions about the relative wages of the cohorts. The similarities between these are striking. Both consider a discrete number of sectors, assume various relative incomes in the sectors, allow shares of population allocated to the sectors to vary over time, and trace the

⁵⁵ Kuznets, Simon S. 1955. Economic Growth and Income Inequality. *The American Economic Review* 45 (1):1-28; p. 13.

implications for the path of income inequality (in the latter case both absolute and relative to the rest of the population). So that the reader may judge for herself the stylistic and substantive connections between these, both tables are shown on the following page.

Table 1. Percentage Shares of 1st and 5th Quintiles in the Income Distribution for Total Population Under Varying Assumptions concerning Per Capita Income Within the Sectors, Proportions of Sectors in Total Number, and Intrasector Income Distributions⁵⁶

	Proportion of Number in Sector A to Total Number						
	0.8 (1)	0.7 (2)	0.6 (3)	0.5 (4)	0.4 (5)	0.3 (6)	0.2 (7)
I. Per Capita Income of Sector A=50; of Sector B=100							
1. Per capita income of total population	60	65	70	75	80	85	90
Distribution (E) for Both Sectors							
2. Share of 1 st quintile	10.5	9.9	9.6	9.3	9.4	9.8	10.2
3. Share of 5 th quintile	34.2	35.8	35.7	34.7	33.2	31.9	30.4
4. Range (3-2)	23.7	25.9	26.1	25.3	23.9	22.1	20.2
Distribution (U) for Both Sectors							
5. Share of 1 st quintile	3.8	3.8	3.7	3.7	3.8	3.8	3.9
6. Share of 5 th quintile	40.7	41.9	42.9	42.7	41.5	40.2	38.7
7. Range (6-5)	36.8	38.1	39.1	39.0	37.8	36.4	34.8
Distribution (E) for Sector A, (U) for Sector B							
8. Share of 1 st quintile	9.3	8.3	7.4	6.7	6.0	5.4	4.9
9. Share of 5 th quintile	37.7	41.0	42.9	42.7	41.5	40.2	38.7

⁵⁶ For methods of calculating the shares of quintiles, see p. 12 and fn. 6 of Kuznets, Simon S. 1955. Economic Growth and Income Inequality. *The American Economic Review* 45 (1):1-28.

(p. 12) The implications can be brought out most clearly with the help of a numerical illustration (see Table I). In this illustration we deal with two sectors: agriculture (A) and all others (B). For each sector we assume percentage distributions of total sector income among sector deciles: one distribution (E) is of moderate inequality, with the shares starting at 5.5 per cent for the lowest decile and rising 1 percentage point from decile to decile to reach 14.5 per cent for the top decile; the other distribution (U) is much more unequal, the shares starting at 1 per cent for the lowest decile, and rising 2 percentage points from decile to decile to reach 19 per cent for the top decile. We assign per capita incomes to each sector: 50 units to A and 100 units to B in case I (lines 1-10 in the illustration) ; 50 to A and 200 to B in case II (lines 11-20). Finally, we allow the proportion of the numbers in sector A in the total number to decline from 0.8 to 0.2.

The numerical illustration is only a partial summary of the calculations, showing the shares of the lowest and highest quintiles in the income distribution for the total population under different assumption.⁶ The basic assumptions used throughout are that the per capita income of sector B (nonagricultural) is always higher than that of sector A; that the proportion of sector A in the total number declines; and that the inequality of the income distribution within sector A may be as wide as that within sector B but not wider.

(fn. 6) The underlying calculations are quite simple. For each case we distinguish 20 cells within the total distribution-sets of ten deciles for each sector. For each cell we compute the percentage shares of both number and income in the number and income of total population, and hence also the relative per capita income of each cell. The cells are then arrayed in increasing order of their relative per capita income and cumulated. In the resulting cumulative distributions of number and countrywide income we establish, by arithmetic interpolation, if interpolation is needed, the percentage shares in total income of the successive quintiles of the country's population.

10. Range (9-8)	28.3	32.7	35.4	36.0	35.5	34.8	33.8
II. Per Capita Income of Sector A=50; of Sector B=200							
11. Per capita income of total population	80	95	110	125	140	155	170
Distribution (<i>E</i>) for Both Sectors							
12. Share of 1 st quintile	7.9	6.8	6.1	5.6	5.4	5.4	5.9
13. Share of 5 th quintile	50.0	49.1	45.5	41.6	38.0	35.0	32.2
14. Range (13-12)	42.1	42.3	39.4	36.0	32.6	29.6	26.3
Distribution (<i>U</i>) for Both Sectors							
15. Share of 1 st quintile	3.1	2.9	2.7	2.6	2.6	2.7	3.1
16. Share of 5 th quintile	52.7	56.0	54.5	51.2	47.4	44.1	40.9
17. Range (6-5)	49.6	53.1	51.8	48.6	44.8	41.4	37.9
Distribution (<i>E</i>) for Sector A, (<i>U</i>) for Sector B							
18. Share of 1 st quintile	7.4	6.2	5.4	4.7	4.2	3.9	3.8
19. Share of 5 th quintile	51.6	56.0	54.6	51.2	47.4	44.1	40.9
20. Range (9-8)	44.2	49.8	49.2	46.5	43.2	40.2	37.2

Some differences will not check because of rounding.

Table 2.

Illustrative Calculations of the Effect of “Recency of Entry Mix” on Movement of Average Income and Income Dispersion, Jews in the U.S.A., 1900-1950⁵⁷

	Assumption I			Assumption II		
	Index of Average Income (1900=100) (1)	Index of Absolute Dispersion (1900=100) (2)	Relative Dispersion (<u>Absolute</u> Av. Income) (3)	Index of Average Income (1900=100) (4)	Index of Absolute Dispersion (1900=100) (5)	Relative Dispersion (<u>Absolute</u> Av. Income) (6)
1900	100	100	0.32	100	100	0.43
1905	95	97	0.34	94	98	0.45
1910	94	102	0.34	93	100	0.46
1915	102	97	0.31	102	98	0.40
1920	113	86	0.25	117	86	0.31
1925	120	87	0.23	126	87	0.29
1930	130	65	0.16	139	65	0.20
1935	138	33	0.08	150	33	0.09
1940	137	39	0.09	148	39	0.11
1945	140	24	0.05	152	24	0.07
1950	140	24	0.05	152	24	0.07

Assumption I — Ratio of average income of groups by years of residence:

0-5 —1; 6-10 —1.5; 11-20 —2.0; over 20 —3.0.

Assumption II— Ratio of average income of groups by years of residence:

0-5 —1; 6-10 —2.0; 11-20 —3.0; over 20 —5.0.

⁵⁷ This table appears in the early version of “Economic Structure” (page 99 of that draft), and is also included in this volume on p. ???.

The connections between Kuznets's understanding of Jewish and broader inequality is further reinforced at least weakly by the apparent temporal coincidence of "Economic Structure and Life of the Jews" and "Economic Growth and Income Inequality". The former was available in a fairly polished draft in April 1956⁵⁸ and the latter was given at the American Economic Association annual meeting at the end of 1954.⁵⁹ Presumably, given that it was not likely his highest work priority, Kuznets had been working on his article on Jewish economics for several years. Thus, it seems plausible that his insight into the relationship between income inequality and development, as well as the right way to model this interaction, actually arose from his work on the history of Jews. At least, his work on international income inequality seems to have been instrumental in allowing him to understand the evolution of Jewish economic structure; at most, his thinking about the economics of American Jewry may have led him to the broader connections between development and inequality.

Development and Culture

Kuznets's second objection to the initial thrust of development theory was his critique of the doctrine that developing countries could or should follow the development paths of presently developed countries. Kuznets was skeptical about how much might be learned about the future of the developing countries by studying the past of developed countries. In his book *Modern Economic Growth*,⁶⁰ the eponymous 1973 article, and several

⁵⁸ It was sent to David Landes as a draft, which I have a copy of, on that date. Kuznets, Simon S. 1956. Economic Structure and Life of the Jews.

⁵⁹ Kuznets, Simon S. 1955. Economic Growth and Income Inequality. *The American Economic Review* 45 (1):1-28.

⁶⁰ Kuznets, Simon S. 1966. *Modern Economic Growth: Rate, Structure, and Spread*. New Haven: Yale University Press.

other articles, he lays out a variety of reasons why the development path of currently underdeveloped countries may differ fundamentally from the past of the developed nations.

Some of these differences were what would seem fairly obvious and conventional economic and technological distinctions. These are of less interest for my argument, but were not well-understood by economists at the time so I briefly summarize them here. Most currently underdeveloped countries have lower per-capita output than the Western nations, even before their industrialization, and are not great political powers, as were most wealthy nations during their period of development. Furthermore, consumer preferences have, to some extent, leapfrogged over early industrial goods. Service goods are a growing share of modern economies, making global demand faced by developing nations different from that in the 19th century.⁶¹ Where currently developed countries existed at or near the technological frontier during much of their process of development, currently underdeveloped nations linger in a sort of limbo. The wide availability of certain technologies has rapidly improved standards of living in developing nations. Vaccinations, television and other consumer goods have become increasingly available to citizens of poor nations, extending the length and quality of life. At the same time, basic productive technologies, particularly in transport and capital goods, have failed to filter across national borders. This strange combination of consumerism without industrialism puts poor countries in a distinctly different technological state than that facing the West before its industrialization.⁶²

More innovative was the emphasis Kuznets put on non-economic distinctions, such as institutions and culture. These were uncommon topics for study in economics in any

⁶¹ Kuznets, Simon S. 1966. *Modern Economic Growth: Rate, Structure, and Spread*. New Haven: Yale University Press; pp. 435-6.

⁶² Kuznets, Simon S. *Nobel Prize Speech* 1971.

form and thus Kuznets's focus on them was itself an important contribution. The first and probably least controversial of these heterodox factors was institutional. Most, though not all, currently developed countries reached that state during periods of growing democratic participation and under governments checked by the demands of individual rights and liberties. They also had developed, modern legal systems, largely professional civil services, and other modern governance institutions. To a large extent these institutions are weak or absent in many, if not most, developing nations. In addition, most developing nations had a far less benign experience with colonization than did the few currently developed nations that were at one time colonies. Their populations are largely the colonized, rather than the colonizers. As an exception that proved the rule on the plight of most developing countries, Kuznets in his work on Israel emphasizes the institutions that developed to deal with the state of constant war and the status of colonizer rather than colonized.

Compounding these problems for most developing countries is the fact that colonialism, as well as the presence of a developed global market outside the country, means that many sources of significant wealth, far beyond the usual productive capacity of the country, are available to select internationalized elites. This exacerbates problems of income and wealth inequality that may have been less severe in Europe during its development. Consequently, if institutions play an important role in economic development, as it seems likely they do, then it would be surprising if the development paths of currently developing countries were similar to the past of currently developed nations.⁶³

More controversially, Kuznets highlights the cultural contrasts between currently backward nations and the past of wealthy nations. Unlike other divergences, he has little data to formalize these distinctions. Religious differences, absence of Western cultural

⁶³ Kuznets, Simon S. 1966. *Modern Economic Growth: Rate, Structure, and Spread*. New Haven: Yale University Press.

heritage, and “colonial hangover” all make the cultures of developing nations systematically different from those of developed nations at their time of industrialization. Kuznets concedes that little is known about the relationship between such cultural factors and economic growth and therefore that the implications of such differences may or may not be important. But he emphasizes that it is worth keeping in mind the role of such cultural elements may play in supporting an entrepreneurial society by facilitating risk sharing and informal trade, efficiently allocating resources to new endeavors, and fostering a focus on the educational and intellectual culture important to developing the human capital .⁶⁴

While certainly not opposed to the use of economic history to learn about the economic future, Kuznets was strongly skeptical of simplistic, de-contextualized extrapolation from a hazy Western economic past.⁶⁵ In moving economic theory beyond such “linear” and purely economic theories of growth, Kuznets helped give birth to modern development economics, which has focused on understanding the economics of currently developing countries on their own terms. At the same time, Kuznets was not, like some of his more radical colleagues such as Albert Hirschman⁶⁶, opposed to economic theorizing or committed to the notion that development policy should be based on purely “case-based” or “pragmatic” considerations.⁶⁷ Rather, Kuznets argued for a vision of development economics that worked to develop generalizing theories, but theories that took into account and understood the most dramatic and important distinctions while abstracting from less important differences. Thus, beyond the narrower point of difference between past and

⁶⁴ Kuznets, Simon S. 1966. *Modern Economic Growth: Rate, Structure, and Spread*: New Haven: Yale University Press; 458-60.

⁶⁵ *Ibid.*, 433-5.

⁶⁶ See, for example, Hirschman, Albert O. 1959. *The Strategy of Economic Development*: New Haven: Yale University Press.

⁶⁷ Kapuria-Foreman, Vibha, and Mark Perlman. 1995. An Economic Historian's Economist: Remembering Simon Kuznets. *The Economic Journal* 105 (433):1524-1547.

future development, Kuznets's emphasis on culture and institutions was revolutionary within development economics and has had a large and lasting impact on the field.

Many of these distinctions between currently developing nations and the past of developed nations parallel the distinctions he draws between Jewish and Gentile economic structures in his work on the economic history of the Jews. Most prominent among these parallels is structural. In his analysis of Jewish and Gentile economic structure, Kuznets primarily stresses the broadest distinctions and most theoretically-justified distinctions between the economics of a small minority within a country and that of the majority, eschewing Jewish-specific explanations.⁶⁸ This parallels Kuznets's later belief in the utility of theories addressing the broad sweep of developing countries, rather than considering development on a case-by-case basis, while at the same time emphasizing the distinction between the current state of developing nations and the past of developed nations.⁶⁹ The basic approach, in both cases, is one of carefully complicating theory one level at a time and of avoiding a rush either to overgeneralization or to a purely case-based, infinitely flexible anti-theoretical analysis. This parallel is further reinforced by the differing "development paths" that he envisions small (immigrant) minorities following relative to the majorities within the same country. Small minorities, unwedded to majority customs, are likely to participate most heavily in the fastest growing technological sectors of the economy, paralleling the possible technological and product-space "leapfrogging" that Kuznets suggests may be possible for developing nations.⁷⁰

Yet, perhaps the greatest relationship between Kuznets's thinking about history of Jews and development economics comes in his emphasis of cultural and social factors. Of

⁶⁸ Kuznets, Simon S. 1960. Economic Structure and Life of the Jews. *The Jews: their History, Culture and Religion*, 1597-1666; pp. 1600-4.

⁶⁹ Kuznets, Simon S. 1963. Notes on the Takeoff. *The Economics of Takeoff into Self-Sustained Growth*.

⁷⁰ *Ibid.*, 1601.

all the foci Kuznets suggested, these are perhaps the most controversial within the economics community, which tends to view such claims as vague at best and culturally deterministic (even crypto-racist) at worst. Despite this widespread hostility within the economic community, Kuznets was deeply committed to the importance of culture, as is perhaps most dramatically demonstrated by the title of the journal he helped found and make prominent, *Economic Development and Cultural Change*. Kuznets's interest in culture and society as driving forces in economic development likely had roots in the continual dialogue he maintained in his personal life with academics of widely varying fields, particularly sociologists and anthropologists,⁷¹ but was also tightly connected to his understanding of the distinctive cultural and social structure of the Jewish community that underlay its economic success and more general economic structure.

In fact, the first time, as far as I know⁷², that Kuznets discusses the relationship between culture and economics is in "Economic Structure." After the publication of that article, it explodes into a primary theme in his research interests. While the founding of *Economic Development and Cultural Change* predates his completion of a draft of "Economic Structure" by four years, it seems plausible that Kuznets's interest in the cultural factors underpinning economic development was reinforced, if not spurred, by his study of Jewish history.

A major theme of "Economic Structure" is the notion that economic patterns of the Jewish community might be explained by the desire within the community to maintain cultural cohesion and that Jews might be willing to sacrifice substantial economic advantage in order to work in sectors of the economy where other Jews work. Kuznets also emphasizes

⁷¹ Kuznets, Paul. *Personal Interview: May 3 2007*.

⁷² The most comprehensive bibliography of his work was compiled by Robert W. Fogel, Marilyn Coopersmith, and Kathleen McCauley and edited and supplemented by Edith Kuznets to be published in a book of posthumous essays in 1989. I will refer to this simply as Kuznets et al. (1989).

that Jewish urbanity may be seen as an outgrowth of the greater anonymity afforded by cities, allowing for increased cultural cohesion without excessive fear of backlash from majority population. Furthermore, in the context of Israel/Palestine, although he implies this may be a feature of Jewish economic structure more broadly, he emphasizes the importance of “social capital” that allowed informal social insurance and efficient allocation of financial resources for investment within the Jewish community.

Kuznets’s interest in the connection between Jewish cultural and social conditions to Jewish economic structure is further highlighted the speech he gave, later in his career, at the home of the President of Israel, which appears in this volume on pages 111-112. In particular, Kuznets stresses the cultural inheritance that appears to spur Jews toward the aggressive pursuit of education, leading to their eventual prominence in the highly trained professional and academic sectors of the American economy (volume 1, pages 111-112). Interestingly, he also stresses the tendency of Jewish intellectuals to be more radically left-wing than intellectuals at large. He argues that, given that more Jews are intellectuals in the first place, this fact has important implications for the political, and eventually economic, composition of the Jewish workforce. In particular, he feared that the increasing trend of radical intellectuals “dropping out” of school, the workforce and mainstream society in general might lead Jews to follow this misguided trend particularly zealously. In understanding the economic position of Jews in the United States after immigration from Eastern Europe, Kuznets emphasizes the fact that Jews had much stronger family ties and were much more likely to bring their entire family along when they immigrated than were other immigrants to the United States.⁷³ He also makes fairly vague references to the selectivity of Jewish history

⁷³ Kuznets, Simon S. 1975. Immigration of Russian Jews to the United States: Background and Structure. *Perspectives in American History*, 35-124; pp. 97-100.

for intelligence and a culture focused on education, an argument controversial anywhere, but particularly among economists.

Finally, Kuznets emphasizes the potential economic inefficiencies and inhibitions of development that ethnic division in developing countries might create.⁷⁴ Considerations of the importance of such ethnic conflict dates to years before those writings, however, when he first took up this theme in his discussion of the economic structure of the Jewish minority, in fact of any ethnic minority.⁷⁵ Beyond his writing on Jewish history, Mark Perlman⁷⁶ also emphasizes more direct connections between Kuznets's, and other Jewish economists', past of separateness and youth in Russia and his hesitance to see the past of developed countries as an appropriate model for current developing countries.

Jewish Immigration and the Population Debate

The 1960's were a time of ferment for neo-Malthusian worries about exploding world population, culminating in Paul Ehrlich's famously alarmist and hugely influential *The Population Bomb*. In the economics community, too, population problems became a focus, including the topic of Joseph Spengler's 1965 Presidential Address to the American Economics Association. The dominant view of academics outside economics followed broadly Ehrlichian lines: population growth threatened a Malthusian implosion of living standards. Economics was somewhat more optimistic, but still concerned; Solow's neo-classical growth model indicated that increased population growth would reduce the level, but not the growth rate, of per-capita incomes.

⁷⁴ Kuznets, Simon S. 1966. *Modern Economic Growth: Rate, Structure, and Spread*. New Haven: Yale University Press; 454-6.

⁷⁵ Kuznets, Simon S. 1960. Economic Structure and Life of the Jews. *The Jews: their History, Culture and Religion*, 1597-1666; pp. 1602-3.

⁷⁶ Perlman, Mark. 1996. Jews and Contributions to Economics: A Bicentennial Review. *The Character of Economic Thought, Economic Characters and Economic Institutions*.

Kuznets influentially⁷⁷ took a different perspective, beginning with his article “Population Change and Aggregate Output”.⁷⁸ Kuznets argues that population growth could actually be an important source of per-capita income growth, as population growth offered increased opportunities for specialization and, more importantly, greater numbers of people meant greater numbers of rare geniuses who advanced technological progress, accelerating economic development. Inspired by and drawing upon Kuznets’s work, Edmund Phelps⁷⁹ summarized this argument eloquently:

One can hardly imagine how poor we would be today if it were not for the rapid population growth of the past to which we owe the enormous number of advanced technologies we enjoy today...If I could redo the history of the world, halving population from the beginning of time on some random basis, I would not do it for fear of losing Mozart in the process.

Phelps’s argument is perhaps nowhere more palpable and present than in the Jewish community: how much richer would today’s world be if the Jewish intellectuals murdered in the Holocaust had survived? Kuznets was also particularly skeptical about the more limited and widely accepted claim that developing countries could not afford their rapid rates of population growth. In a 1967 piece for the *Proceedings of the American Philosophical Society*, “Population and Economic Growth,” Kuznets sought to bring a more balanced perspective to the broader academic community’s understanding of the costs and benefits of population growth.⁸⁰ Kuznets argues that current technology, if simply applied to developing countries,

⁷⁷ Perhaps the most popularly-known pro-population economist Julian Simon (2003. *A Life Against the Grain: The Autobiography of an Unconventional Economist*: New Brunswick, NJ: Transaction Publishers) attributed many of his ideas to Kuznets and even asked Kuznets to write the introduction to his 1977 *The Economics of Population Growth*. Kuznets, in characteristically non-confrontational fashion, demurred. I thank Pierre Desrochers for pointing me to this story.

⁷⁸ Kuznets, Simon S. 1960. Population Change and Aggregate Output. *Demographic and Economic Changes in Developed Countries*; pp. 326-30.

⁷⁹ Phelps, Edmund S. 1968. Population Increase. *The Canadian Journal of Economics* 1 (3):497-518; pp. 510-3.

⁸⁰ Kuznets, Simon. 1967. Population and Economic Growth. *Proceedings of the American Philosophical Society* 111 (3):170-193.

would be more than sufficient to supply food for not only all current inhabitants but also all projected future inhabitants for at least forty years without any increase in arable land.⁸¹ The capacity of population growth to be supported by the adoption of new technology is clearly echoed in Kuznets's comments on the high rates of population growth within the Jewish community. These have hardly retarded Jewish economic advance, given the expansion of Jewish human capital through education to support these greater numbers.⁸² However, in his typical style, Kuznets was exceedingly cautious in advancing these arguments beyond the bounds of what is clear from data. For example, he writes on page 184 of "Population and Economic Growth", "intellectual caution and modesty should compel one to stop right here—with this confession that economic analysis alone is inadequate in dealing with such a fundamental aspect of economic growth as its relationship to population increase." Thankfully, Kuznets did not stop right there, instead expressing the cautious insights he had gained from a lifetime of studying population and development.

Kuznets's emphasis on the role of immigration in economic development also manifests itself in his work on "Israel's Economic Development". Section 3 of that article (???) is devoted to arguing that half or more of the excessive growth of Israel compared to other developing nations is due to the combination of immigration and the young nation's astonishing ability to raise the torrent of immigrants consistently to the level of income of those who immigrated earlier. This success, and the astonishingly rapid economic growth he documents and argues it fostered, contrasts favorably even compared to the impressive track record of Jews in the United States and likely represents one more force that drew the migrant-friendly Kuznets's affections towards the blossoming new state.

⁸¹ Ibid., p. 185.

⁸² Kuznets, Simon S. 1975. Immigration of Russian Jews to the United States: Background and Structure. *Perspectives in American History*, 35-124.

From a careful review of his bibliography,⁸³ it appears that Kuznets's inclination in favor of immigration in his academic work begins with in his pioneering research, jointly with Ernest Rubin, on the subject.⁸⁴ On page 1 they write, "The growth of a national economy may be stimulated by the increase of its population, which strongly affects consumer demand and the size of the labor force ... In the United States population growth has traditionally been regarded as a source of strength and a sign of material progress." Yet, as they discuss, in the 1920's views on population policy reversed sharply: the titanic wave of immigration to the United States that carried the Eastern European Jewish Diaspora to the United States ended with the Immigration Act and National Origins Quota of 1924. Opposition to such policies was one of the few political issues about which generally apolitical Kuznets was passionate, believing that immigration was the foundation of American success.⁸⁵ This is unsurprising, given that Kuznets barely made it into the country before the restrictions were imposed.

While such restrictions were almost certainly motivated more deeply by racist and eugenicist popular sentiment in the country, they were often justified publically, and gained crucial support from (even Jewish) organized labor, by arguments about the excessive overcrowding and wage depression caused by immigration.⁸⁶ Kuznets and Rubin argue, again on page 1, that while these "interests (may have been) acting in supposed accordance with their economic advantage" they were likely misled due to a lack of "carefully considered...scientific research in the national interest," research they hope to provide. Kuznets (1960) goes on to emphasize, in a strikingly theoretical article by his standards, the

⁸³ Kuznets et al. 1989.

⁸⁴ Kuznets, Simon, and Ernest Rubin. 1954. Immigration and the Foreign Born. *National Bureau of Economic Research Occasional Papers* (46).

⁸⁵ Stein, Judith. 2010. Personal Communication, February 10, 2010.

⁸⁶ Goldin, Claudia. 1994. The Political Economy of Immigration Restriction in the United States, 1890 to 1921. *The Regulated Economy: a Historical Approach to Political Economy*.

importance of allowing free migration and communication of intellectuals in order to achieve maximal rates of technical progress. What he saw as mistaken Malthusian views of immigration clearly struck Kuznets close to home.

Work with Milton Friedman

Superficially Milton Friedman and Simon Kuznets do not seem like the most natural collaborators. Arch-free-marketeer and adherent of the Keynesian mainstream, father of modern Neo-Marshallianism and persistent skeptic of simple models, bold public intellectual and ever-cautious empiricist: Friedman and Kuznets had very different professional inclinations. Nonetheless, their lives overlapped significantly for many years. They shared a common mentor and advisor, Wesley Clair Mitchell, who taught them both empirical economics; moreover, Friedman became Kuznets's assistant during the war years. Eventually, the pair published the bulk of Friedman's dissertation, first as an article in 1939⁸⁷ and then as a book in 1945,⁸⁸ both as *Income from Independent Professional Practice*.

This work typified the Mitchell-Kuznets school of empirical work: it was several hundred pages devoted overwhelmingly to the dispassionate tabulation of patterns of income earned by professionals in various careers. The book sowed the seeds of two ideas that, largely through Friedman's advocacy of them, were to be central concerns of labor economics for the following half century: first, occupational licensure as a means of reducing competition, and, second, modeling educational choices as investment in "human capital".

The breakthrough idea of Friedman and Kuznets regarding occupational licensure was typified by a quote they include from Harold Rypins on page 12 of their book, who

⁸⁷ Friedman, Milton, and Simon Kuznets. 1939. Income from Independent Professional Practice. *National Bureau of Economic Research Bulletin* (72-73).

⁸⁸ Friedman, Milton, and Simon S. Kuznets. 1945. *Income from Independent Professional Practice*: New York: National Bureau of Economic Research.

noted, “In all the professions there has developed in the last few years an aristocratic, or at least restrictive movement which, in a sense, is reminiscent of the medieval guilds.” Morris Kleiner⁸⁹ cites Kuznets and Friedman’s work as having major influence on views among economists; particularly influential was the idea, much espoused by Friedman, that occupational licensure may and often does act as a anticompetitive barrier to entry.⁹⁰ Prominent citations of this argument by Theodore Schultz⁹¹ and Gary Becker⁹² confirm this view. In fact, this view was so controversial at the time of publication of the volume that it caused a five-year delay in the publication of the work due to objections of a National Bureau of Economic Research board member affiliated with the American Medical Association. While I am not aware of any work on this history of this contentious proposition, I think most casual readers, including myself, would initially assume this argument was likely of Friedman, the libertarian, not Kuznets, the moderate leftist’s, invention.

While I have no clear proof that this view is mistaken, several elements of Kuznets work suggest that it may be. First, it should be recalled that at this time, Friedman’s ardent free-market views were just developing.⁹³ Second, the medieval guild system was hardly an interest of Friedman’s and therefore the Rypins quote is unlikely to have caught his eye among the myriad of other references from which the pair chose. On the other hand, Kuznets, eventually in 1960 and more extensively in 1975,⁹⁴ wrote on the guild system and

⁸⁹ Kleiner, Morris M. 2000. Occupational Licensing. *The Journal of Economic Perspectives* 14 (4):189-202; p. 190.

⁹⁰ Friedman, Milton, and Rose D. Friedman. 1962. *Capitalism and Freedom*. Chicago: University of Chicago Press Chicago; 137-160.

Friedman, Milton. 1976. Autobiography.

⁹¹ Schultz, Theodore W. 1961. Investment in Human Capital. *American Economic Review* 51 (1):1-17; p. 14.

⁹² Becker, Gary S. 1962. Investment in Human Capital: A Theoretical Analysis. *Journal of Political Economy* 70 (S5):9-49; p.10.

⁹³ Ebenstein, Lanny. 2007. *Milton Friedman: A Biography*. New York: Palgrave Macmillan; pp. 31-52.

⁹⁴ Kuznets, Simon S. 1975. Immigration of Russian Jews to the United States: Background and Structure. *Perspectives in American History*, 35-124; pp. 56-7.

its destructive impact on Jewish life in Eastern Europe. While it is unclear when in his career this interest began, an unpublished, handwritten manuscript that I discovered in the Kuznets archive, “The Doctrine of Usury in the Middle Ages,” indicates that Kuznets had an abiding interest in medieval professional and economic regulation. I include a version of these notes, transcribed by my co-editor Stephanie Lo, on my website <http://www.glenweyl.com>.

While the manuscript is classic Kuznets in concealing its motivation and (perhaps partly due to the Bureau’s censorship) ultimate conclusions, it stands out from the rest of the corpus of Kuznets’s work in several ways. First, it is one of the only writings of his I have encountered with absolutely no quantitative dimension. Second, it is purely a piece of intellectual history, tracing the evolution of the doctrine of usury through the Middle Ages. This is, as far as I know, the only intellectual history work Kuznets ever did. Finally, the piece is exceptional among treatments of usury in that it makes no mention whatsoever of the Jews that ended up filling the money lending roles proscribed to Christians. This omission seems particularly odd given that it seems apparent that the connection to Jewish economic regulation must have played an important role in motivation the manuscript. Of course, it is hard to know whether this was the beginning of an academic paper (as the fact that the paper shows signs of having been edited throughout), a set of personal notes (as the fact that he never after referred to or built upon it suggests) or somewhere in between. Furthermore, while the positioning of the manuscript in the archive indicates that it was from his early career, I have not been able to associate a date to the paper with any certainty (i.e. before or after his work with Friedman). Regardless, it seems clear that Kuznets, not Friedman, was the primary student of the economic and professional system of the old world. In fact, a thorough review of a bibliography of Friedman compiled by Niels

Thygesen⁹⁵ indicates that Friedman's only explicit research on history through 1977 was his celebrated work with Anna Schwartz on money in the United States.

The second idea for which the book is famous sprung from the authors' effort to understand the first. Friedman and Kuznets tried,⁹⁶ and failed,⁹⁷ to explain the income differentials between professional and non-professional careers as a return on capital investments necessary to enter the professions. Their failure led them to conclude that occupational licensure and other barriers made professionals a "noncompeting group" (p. 93). Their method of accounting for the fair market return of such "human" capital investments, which improved on earlier work by J. R. Walsh⁹⁸, became the foundation of an enormous literature on the returns to education.

In fact, the pioneers of the theory of human capital, Yoram Ben-Porath⁹⁹, and to a lesser extent Jacob Mincer,¹⁰⁰ Theodore Schultz,¹⁰¹ and Gary Becker¹⁰², attribute the genesis of their ideas to Friedman and Kuznets's book; for instance, Ben-Porath establishes in his opening paragraph the importance of "[t]he development by Friedman and Kuznets¹⁰³ of the theory...of...human capital." Friedman carried the idea of human capital developed in his

⁹⁵ Thygesen, Niels. 1977. The Scientific Contribution of Milton Friedman. *Scandinavian Journal of Economics* 79 (1):56-98.

⁹⁶ Friedman, Milton, and Simon S. Kuznets. 1945. *Income from Independent Professional Practice*. New York: National Bureau of Economic Research; pp. 83-4.

⁹⁷ *Ibid.*, pp. 84-6.

⁹⁸ Walsh, J. R. 1935. Capital Concept Applied to Man. *Quarterly Journal of Economics* 49 (2):255-285.

⁹⁹ Ben-Porath, Yoram. 1967. The Production of Human Capital and the Life Cycle of Earnings. *Journal of Political Economy* 75 (4):352-365; p. 352. Admittedly, Ben-Porath was not as central of a figure to this developing literature as the others, but he does offer the clearest articulation of the role played by Friedman and Kuznets. A more important figure was Barry Chiswick (Becker, Gary S. and Barry R. Chiswick. 1966. "Education and the Distribution of Earnings," *American Economic Review* 56: 358-69.), especially given that he has become something of an heir to Kuznets in his interests in immigration and the economic history of Jews.

¹⁰⁰ Mincer, Jacob. 1958. Investment in Human Capital and Personal Income Distribution. *Journal of Political Economy* 66 (4):281-302; p. 284.

¹⁰¹ Schultz, Theodore W. 1961. Investment in Human Capital. *American Economic Review* 51 (1):1-17; p. 14.

¹⁰² Becker, Gary S. 1962. Investment in Human Capital: A Theoretical Analysis. *Journal of Political Economy* 70 (S5):9-49; p. 10.

¹⁰³ Friedman, Milton, and Simon S. Kuznets. 1945. *Income from Independent Professional Practice*. New York: National Bureau of Economic Research.

work with Kuznets forward to his classic theory of permanent income,¹⁰⁴ the fundamental ideas of which he attributed to his work with Kuznets in his Nobel autobiography.¹⁰⁵ Friedman's interest in education and its implications for income continued throughout his career, albeit somewhat obliquely through his interest in lifetime, as opposed to temporary, income,¹⁰⁶ another idea¹⁰⁷ he attributed to his work with Kuznets, and reform of the educational system.¹⁰⁸ Likely through his influence, including his role as Becker's advisor, human capital became a dominant theme of the Chicago school, occupying much of the attention of scholars such as Becker, Schultz and Ben-Porath. Thus, there is little doubt that, despite its relative obscurity, *Income from Independent Professional Practice* set off a quiet revolution in labor economics.

Yet, from where did its emphasis on human capital originate? The most I can do is speculate as I found no information concerning the process of writing the work. However, the connections to Jewish economic history, and Kuznets's understanding of it, could hardly be more apparent. Perhaps the primary focus of virtually all of Kuznets's work on the economic history of the Jews¹⁰⁹ was their outstanding educational attainment and the role

¹⁰⁴ Friedman, Milton, and National Bureau of Economic Research. 1957. *A Theory of the Consumption Function*. Princeton: Princeton University Press.

¹⁰⁵ Friedman, Milton. 1976. Autobiography.

¹⁰⁶ Friedman, Milton, and National Bureau of Economic Research. 1957. *A Theory of the Consumption Function*. Princeton: Princeton University Press.

¹⁰⁷ Stein (2009) suggests Kuznets may also have been the genesis of the emphasis of the Chicago school on home production, having emphasized in his work during the war that national income accounts should consider women's work in the home, a fight he lost. Given that I can find no references to this in any written work by Kuznets or Friedman it remains a speculation and given that it is not directly connected to my thesis I will not explore it further.

¹⁰⁸ Friedman, Milton. 1955. The Role of Government in Education. *Economics and the Public Interest*, 123-144.

Friedman, Milton. 1955. The Role of Government in Education. *Economics and the Public Interest*, 123-144.

¹⁰⁹ Kuznets, Simon, S. 1960. Economic Structure and Life of the Jews. *The Jews: their History, Culture and Religion*, 1597-1666.

Kuznets, Simon S. 1972. Economic Growth of U.S. Jewry. *Papers of Simon Smith Kuznets, 1923-1985 (inclusive), 1950-1980 (bulk), Correspondence and other papers relating to Jewish studies, ca.1959-1977, Box 1, in folder \em Economic Structure of U.S. Jewry. Call Number: HUGFP88.25.*

Kuznets, Simon S. 1972. *Economic Structure of U. S. Jewry: Recent Trends*. Jerusalem: Institute of Contemporary Jewry, Hebrew University of Jerusalem.

this played in accounting for their outstanding differential economic advance beyond the position of the general immigrant and native population. It is widely known that education and (religious) study were central values of Judaism at least since the advent of Christianity and Kuznets documented quantitatively the universal popular perception that this translated into far higher Jewish educational attainment in the United States than among other immigrant or native groups. For example, Kuznets¹¹⁰ found that Jews of Eastern European descent completed college at twice the rate of the general American population.

Any direct connection between Jewish educational attainment and the human capital theory of Kuznets's work with Friedman is at best speculative. Nonetheless, it seems a plausible potential source of motivation for that important research. Furthermore, it is not just its connection to Jewish economic history that is hard to draw out of *Income*. In typical Kuznets style, the book is written in highly technical and concrete style that entirely masks both the motivation for its writing as well as the broad generalizations based on the research that Friedman and others obviously took away from it. For example, the most influential passage of the book, the basis of subsequent interest in licensure as a barrier to entry (page 93) reads:

The inference from this analysis is that professional workers constitute a 'non-competing' group...Our data suggest that this group is sufficiently small to lead to underinvestment...that in the absence of...limitations on entry, incomes in the professions would exceed incomes in other pursuits by less than they do now. The limitations of the data and the speculative character of our analysis make this conclusion tentative.

Kuznets, Simon S. 1975. Immigration of Russian Jews to the United States: Background and Structure. *Perspectives in American History*, 35-124.

¹¹⁰ Kuznets, Simon S. 1972. Economic Growth of U.S. Jewry. *Papers of Simon Smith Kuznets, 1923-1985 (inclusive), 1950-1980 (bulk), Correspondence and other papers relating to Jewish studies, ca.1959-1977, Box 1, in folder \em Economic Structure of U.S. Jewry. Call Number: HUGFP88.25.*

This bears comparison with Friedman's later writing, in *Capitalism and Freedom* on occupational licensure on pages 141-142:

Licensure therefore frequently establishes essentially the medieval guild kind of regulation in which the state assigns power to the members of the profession ... the problem of licensing of occupations is something more than a trivial illustration of the problem of state intervention, that it is already in this country a serious infringement on the freedom of individuals to pursue activities of their own choice, and that it threatens to become a much more serious one with the continual pressure upon legislatures to extend it.

The reserve, modesty and scientific demeanor with which Kuznets expressed his claims means that any hopes of understanding the sources of his ideas must be somewhat indirect. The most we may hope for in understanding the motivation behind this work is a series of circumstantial, mutually reinforcing connections between Kuznets's understanding of Jewish history and various areas of his mainstream economics.

The Cautious Empiricist of the Eastern European Jewish Diaspora

While it certainly carries its frustrations for the historian, Kuznets's reticence about the personal causes and consequences of his work is key to understanding him and his contribution. When Bertil Ohlin presented Simon Kuznets, his committee's selection as 1971 Nobel laureate in Economics, he said, "Kuznets, of course, makes use of models which demonstrate the connections between strategic elements in the economic system, but he shows a very limited sympathy for abstract and generalizing models which provide few opportunities of empirical testing. He chooses and defines concepts which (sic) correspond

as closely as possible to what can be observed and statistically measured.” Fogel¹¹¹ discusses extensively about Kuznets’s careful, humble, empirical approach to economics.

His hesitance to extrapolate from data or propose hypotheses not directly based in observation is apparent throughout his research. I consider a couple of examples. The conclusion of his famous AEA Presidential Address in which he proposed the inverted U hypothesis begins “In concluding this paper, I am acutely conscious of the meagerness of reliable information presented. This paper is perhaps 5 per cent empirical information, 95 per cent speculation, some of it possibly tainted by wishful thinking.” The apology for this, one of the most empirically based presidential addresses for many years, continues for almost half a page. His extreme caution applied even to the most mundane extrapolations from data. On page 21 of “Economic Growth of U. S. Jewry” he ends a paragraph of apologies for the assumptions he was forced to make in order to generate the first estimates of a time series of American Jewish population with “We shall have to rest content with these rough approximations.” To the jaded reader who is accustomed to daily encounters with the most complex contortions of structural econometrics, it is astonishing¹¹² to see such fervent caution about steps of data collection that would probably not even be reported in most contemporary papers.

Kuznets’s painstaking effort to separate conjecture from fact reflects a related, but broader, set of dualities that pervaded his life and work: between his work on Jewish history and its motivation in his past, between that work and his professional life as an economist and between his loyalty to his heritage and the strict American life he built for his family. To

¹¹¹ Fogel, Robert W. 1987. Some Notes on the Scientific Methods of Simon Kuznets.

¹¹² In fact Kuznets’s extreme care is likely a good part of the reason why, despite his enormous contribution to economics, Kuznets has few contemporary followers. In an age where fights over empirical methodology are between an “atheoretical” camp using instrumental variables and regression discontinuity analysis and a “structural” camp advocating complex models of entire industries, it is hard to imagine where a skeptic of even multiple linear regression, as Fogel (1987, 16-17) describes Kuznets as being, could fit in.

gain a richer perspective on Kuznets as a thinker and as a person, it is useful to consider each of these, briefly, in turn.

It could hardly be more apparent that Kuznets's past and identifications led him to do his research on Jewish economic history. In fact, in a 1973 letter to Martin Feldstein, which we have published on page ??? of this volume, Kuznets writes "I did this paper (and other in the series) because of my interests and associations as a Jew (I frankly doubt that were it not for these interests and associations, I would have, as a general economist, devoted much thought or effort to this topic)." However, absolutely no sense for such motivations, or even any mention of his past, appears in any of Kuznets's scholarly work on the history of the Jews. His first article on the Jews¹¹³ begins in typically universalistic fashion, "The economic structure and life of any group, within a given historical epoch, is largely a matter of its natural and social environment." In the most informal and personal of his writing on the history of the Jews, a speech he gave at the home of the President Zalman Shazar of Israel,¹¹⁴ Kuznets touches on a wide range of topics very close to his life, yet never explicitly betrays the slightest personal interest or emotion. When he discusses the forcing of Jews in Eastern Europe, like his parents, towards a limited range of professions,¹¹⁵ when he analyzes the cultural inheritance of Jews and the role it plays in their success,¹¹⁶ when he discusses the difficulties immigrants faced with language,¹¹⁷ when he analyzes the constraints on occupational choice imposed by anti-Semitism¹¹⁸ and even when he notes the

¹¹³ Kuznets, Simon S. 1960. Economic Structure and Life of the Jews. *The Jews: their History, Culture and Religion*, 1597-1666.

¹¹⁴ Kuznets, Simon S. 1972. Economic Growth of U.S. Jewry. *Papers of Simon Smith Kuznets, 1923-1985 (inclusive), 1950-1980 (bulk), Correspondence and other papers relating to Jewish studies, ca.1959-1977, Box 1, in folder \em Economic Structure of U.S. Jewry. Call Number: HUGFP88.25.*

¹¹⁵ *Ibid.*, pp. 11-2.

¹¹⁶ *Ibid.*, pp. 12-4.

¹¹⁷ *Ibid.*, pp. 14-6.

¹¹⁸ *Ibid.*, p. 18. Rosovsky reports that anti-Semitism played a role in Kuznets's residential choice in Philadelphia.

overwhelming preponderance of Jews among Ivy League faculty,¹¹⁹ he never mentions his own or his family's experience nor lapses into any sort of discernable emotion.

Even with motives so carefully absent, Kuznets worried that his research on the economic history of the Jews was too personal to constitute real professional work. He therefore sought to separate it entirely from his mainstream work in economics. In fact, of the half dozen colleagues and students of Kuznets's I interviewed for this project, not a single one ever remembers discussing with him about any for his work on the history of the Jews, despite all of their being of Eastern European Jewish descent themselves! When Martin Feldstein asked in 1973 to include his unpublished "Economic Growth of U. S. Jewry" in a Harvard Departmental working paper series, Kuznets¹²⁰ replied, after noting as above his personal motivation in writing the paper, "I would deem it inappropriate to (publish the paper in the series)...[O]bjective as the tools employed may be, the very choice of topic reveals a concern with, and interest in, a highly specialized aspects (sic). I would feel differently if this were a paper on trends in the structure of several ethnic minorities in the United States."¹²¹

Kuznets ensured his past was, in fact, two steps removed from his profession. It was not only his interested in Jewish history that Kuznets clearly separated from this professional life and relationships, but also the entirety of his personal views and opinions. Rosovsky,¹²² an advisee of Kuznets and one of this close friends and colleagues, reports that all throughout the 1960's, perhaps the most political moment of US history, he remembers Kuznets as being perhaps the only member of the Harvard department who expressed no

¹¹⁹ Ibid., pp. 26-7.

¹²⁰ Kuznets, Simon S. 1973. Personal letter to Martin Feldstein. *Papers of Simon Smith Kuznets, 1923-1985 (inclusive), 1950-1980 (bulk), Correspondence and other papers relating to Jewish studies, ca.1959-1977*, Box 1, in folder \em Correspondence, Tables and Worksheets on Jewish Economics. Call Number: HUGFP88.25.

¹²¹ See page ??? of this volume.

¹²² Rosovsky, Henry. *Personal Interview: January 28 2010*.

political views he could recall. In fact, none of the dozens of colleagues and family members of Kuznets's I interviewed had a recollection of *any* strong political views (other than on immigration as described above) held by Kuznets and almost all described him as apolitical. While Rosovsky also attests that Kuznets was also one of the few Jews at Harvard that made no attempt to conceal his background, he made no attempt to discuss any aspect of his personal background or views professionally. The separation between his past and his present extended beyond work, back another level, into a separation between his private past and the future he built for his family.

Unlike the fabled and stereotypical first-generation Eastern European Jewish immigrant, but typically for Jewish fathers of his generation, Simon Kuznets taught his children almost nothing of the “old world” he had left behind. He never spoke with them in Yiddish nor Russian, never forced or even encouraged them to attend synagogue or remember their Jewish heritage, never cooked them Russian food nor played them Russian or Yiddish music.¹²³ While he maintained a personal interest in contemporary Russian literature and affairs, as many accounts attest, he never imposed these interests on his family. Kuznets took Judah Leib Gordon's *maskilim* mantra “Be a Jew in and a man in the street” to an extreme: he was a fervent (cultural) Jew in his heart but a man to all the world.

Thus, I hope, the full portrait of Kuznets I wish to paint has come into view. He was a consummate inductive empiricist whose interpretation of facts that confronted him was shaped by the categories of his past and his struggle to understand it. He was a passionately dispassionate analyst of the history of an interesting ethnic minority, which happened to be his own people. He was an apolitical fervent supporter of the state of Israel

¹²³ Kuznets, Paul. *Personal Interview: May 3 2007*.
Stein, Judith. 2010. Personal Communication, February 10, 2010.

from the day of its birth,¹²⁴ making regular trips to the Falk Institute there and becoming a fixture of the Israeli economics community¹²⁵. The unifying theme of his life and work was a series of dualities and apparent contradictions, a straightforward enigma: the cautious empiricist of the Eastern European Jewish Diaspora.

Eastern European Jews and Modern Economics

What interests me in Kuznets's story is not its idiosyncrasy or quiriness, but rather how it takes to a logical extreme a broader story of the Jews of Eastern European descent who played such a crucial role in transforming economics in the twentieth century. That the Eastern European Jewish Diaspora was at the center of creating Economics, as we understand it today, can hardly be doubted. Some simple statistics may be instructive.

According to data collected by jinfo.org¹²⁶ and systematized for this article by Yanislav Petrov¹²⁷, since 1969 when the Economics prize was first given, 50% of economics Nobel laureates have been Jews. This compares with 29% in Physics and 27% in Chemistry over the same time frame. Similarly, since the awards began at similar times in the late 1940's and early 1950's, 63% of recipients of the John Bates Clark medal have been Jews, compared to 27% of the comparable Fields medal in mathematics.

¹²⁴ Kuznets, Paul. *Personal Interview: May 3 2007*.

¹²⁵ Rosovsky recalls that every time one came to visit Cambridge they would make a mandatory pilgrimage to the Kuznets residence on Francis Avenue, just a block and a half from my current apartment.

¹²⁶ *Jews in Economics*. JInfo.org 2009.

¹²⁷ Petrov, Yanislav. 2010. Data on Jewish Accomplishments in Economics and Other Scientific Fields. <http://www.people.fas.harvard.edu/~weyl/JewsinScience.xls>.

Table 3.

Jewish accomplishments in economics and other scientific fields

	Percentage of Jewish recipients
Nobel Prizes:	
Economics (1969-2009)	42.2%
Chemistry (1969-2009)	28.4%
Physics (1969-2009)	27.6%
John Bates Clark Medal (Economics) (1947-2009)	62.5%
Fields Medal (Mathematics) (1936-2006)	27.1%

Sources: "The Jewish Contribution to World Civilization", <http://www.jinfo.org/>; "All Laureates in Economic Sciences", http://nobelprize.org/nobel_prizes/economics/laureates/; "John Bates Clark Medal", http://www.vanderbilt.edu/AEA/clark_medal.htm; and "International Mathematical Union: Fields Medal", <http://www.mathunion.org/general/prizes/fields/details/> (All accessed 10 February 2010).

These statistics are particularly striking given their contrast with history. During the 19th century, economics had few, if any, Jews and was in fact dominated by Christian activists; almost 40% of those who founded the American Economic Association in 1885 were either ordained ministers or lay religious activists.¹²⁸ Also, anti-Semitism was common in the profession, as discussed in Melvin Reder¹²⁹ and immortalized in the famous story, recounted by Richard Swedberg,¹³⁰ of Paul Samuelson's decision to found an economics department at the Massachusetts Institute of Technology after being rejected for an assistant professorship at Harvard despite having written one of the best dissertations of the century.

The cold statistics are very much visible in the everyday life of the profession. My hair has always had the characteristically tight Jewish curls, but despite growing up in heavily Jewish communities my whole life I had never met so many fellow Jewish curly-heads as I did when I came to Harvard's economics department. And the trend is even more pronounced if one focuses even more narrowly than the leaders and prizewinners in the field on the few figures who were truly revolutionary in building the framework of modern economics.

Simon Kuznets built the accounting methodologies underlying most of modern empirical economics. Paul Samuelson, father of the dominant algebraic-computational school of modern economic theory, was the son of Polish Jewish immigrants living in Indiana.¹³¹ Kenneth Arrow, father of the other main geometric-mathematical strain of economic theory, was born to a New York Jewish family in the early 1920's. Two of the three founders of the Neo-Marshallian second Chicago School, Milton Friedman and Gary

¹²⁸ Fogel, Robert W. 2000. Simon S. Kuznets: April 30, 1901-July 9, 1985; pp. 3-4.

¹²⁹ Reder, Melvin W. 2000. The Anti-Semitism of Some Eminent Economists. *History of Political Economy* 32 (4):833-856.

¹³⁰ Swedberg, Richard. 1991. *Schumpeter: A Biography*: Princeton: Princeton University Press; p. 139.

¹³¹ Weinstein, Michael M. 2009. Paul A. Samuelson, Economist, Dies at 94. *New York Times* (December 13).

Becker, were respectively the son of very recent Jewish immigrants from Hungary¹³² and the son of an Eastern European Jewish immigrant mother.¹³³ Jacob Marschak, founder of modern structural econometrics, who died before he could be awarded the Nobel Prize, was a Jewish immigrant¹³⁴ from Kiev. Many of the other heroes of any account of the forging of the modern quantitative, empirical-mathematical Neo-Classical economics, such as that given by Roy Weintraub,¹³⁵ are of Eastern European Jewish extraction. Of course there are many exceptions: John Hicks in theory, George Stigler in the Chicago School, Trygve Haavelmo and Tjalling Koopmans in econometrics. Nonetheless, it is astonishing that a group representing less than three in every hundred people in the United States and less than two in every *thousand* worldwide was the overwhelming force in the development of modern economics, far beyond even the outsized role they played in physics, mathematics and other fields.

Why? The most straightforward and essentialist answer, one that borders dangerously on standard anti-Semitic images of Shylock the moneylender, is that there is some inherent connection (perhaps through occupational restrictions in the old country and their legacy) between the Jewish cultural inheritance and the questions in which economists take interest. Equally speculative, but more plausible to me, is a story suggested by Kuznets's own life: that there was something that placed the generation of Jews that arrived in the United States between 1880 and 1920, and their children and grandchildren, in an ideal position to lead a revolution in economics. I conclude by exploring a possible causal mechanism for this conjecture. Any attempt to actually provide evidence for it, to test it

¹³² Theroux, David J. 2006. Milton Friedman (1912-2006).

¹³³ Becker, Gary S. *Autobiography* 1992.

¹³⁴ According to a correspondence between Jacob Viner and Joseph Schumpeter reviewed by Amartya Sen, Marschak was nearly barred from becoming one of the first fellows of the Econometric Society because Schumpeter believed he was "both a Jew and a socialist".

¹³⁵ Weintraub, E. Roy. 2002. *How Economics Became a Mathematical Science*. Durham, NC: Duke University Press.

against alternative hypothesis, or even to formulate such alternatives, is left squarely to future research.

Perhaps the most striking feature of the revolutions wrought by the great economists of Eastern European Jewish extraction was their fundamentally methodological nature. Kuznets, Samuelson, Arrow, Friedman, Becker and Marschak certainly added important substantive insights to the field. But what they are overwhelmingly remembered for was the methodological lenses (empirical, mathematical, statistical and “price theoretic”) they made central to the discipline. None of these had any discernible connection to anything Jewish; in fact by stripping away historicist and institutionalist traditions, they represented a forceful universalizing push within the discipline. As Friedman’s quote with which I began this paper suggests, the sources of this revolution must be sought elsewhere than in their formal writings as these sources themselves impelled them to hide their tracks.¹³⁶ To paraphrase Chaim Weizmann’s (who also hailed from Pinsk, 1949) famous dictum, the great Eastern European Jewish Diaspora economists of the twentieth century were just like any other economists, only more so.

On the “demand side”, the universalizing thrust of “scientific”¹³⁷ economics offered a natural defense against anti-Semitic hostility to Jewish influence in the more culturally-implicated humanities and social sciences. This made economics a unique outlet for Jewish

¹³⁶ In fact, Kevin Hoover pointed out to me that Friedman’s quote parallels a distinction Hans Reichenbach (1938. *Experience and Prediction: An Analysis of the Foundations and Structure of Knowledge*. Chicago: University of Chicago Press) dwelled on between psychology and epistemology, between the historical and logical origins of an idea. Ronald Giere (1999. *Science without Laws*. Chicago: University of Chicago Press; p. 228) argues that this distinction was important to Reichenbach, and perhaps by extension to Friedman, precisely because of its connection to the anti-Semitic attempt to discredit many modern scientific ideas as “Jewish” science. This highlights the “demand side” cause of the universalizing, methodological thrust of the Eastern European Jewish contribution to modern economics that I discuss below.

¹³⁷ David Hollinger (1996. *Science, Jews and Secular Culture*. Princeton: Princeton University Press) makes a similar argument regarding the sciences and public intellectual culture more broadly. Steven Beller (1989. *Vienna and the Jews: 1867-1938*. Cambridge, UK: Cambridge University Press.) suggests such demand side factors were the driving forces in establishing the dominantly Jewish professions in Vienna prior to German annexation, while also emphasizing, along the lines of my argument, the importance of heterogeneous and often surprising Jewish reactions to Jewishness.

political and social thinkers. Furthermore, Eastern European Jews' past prepared them with the skills for which modern economics called, but had not prepared them for the problems it would pose, leaving them with fresh eyes. Derek Penslar's¹³⁸ impressive recent book, *Shylock's Children: Economics and Jewish Identity in Modern Europe*, traces the history of modern Jewish economic thinking in Western Europe and the lack thereof in Eastern. Penslar argues that Jewish learning through the early *Haskalah* focused overwhelmingly on the natural sciences, neglecting social sciences given the lack of Jewish influence over or interest in the policies of Gentile host societies.¹³⁹ While Jewish politico-economic thinking developed over the course of the early 19th century, it was confined almost entirely to (a radical fringe of) German Ashkenazi and especially Western European Sephardic Jewry.¹⁴⁰ The aspiration of Eastern European Jewish students remained firmly religious or, if secular, natural scientific. Cut-off from political influence, concern and learning by repression, Eastern European Jews came to the United States with extraordinary training in and devotion to the study of natural scientific method but with an equal political naïveté.

Yet the rapid succession of emancipation, immigration to democratic America and the rise of political anti-Semitism in Germany and economic catastrophe worldwide quickly forced them to come to terms with social affairs. Rapidly upwardly mobile, powerfully organized through unions given their professional concentration in America, finally offered a voice through American free speech and universal franchise, Jews rapidly emerged as a political force in the United States. A select, but disproportionate, few of these immigrants and immigrants' children had extraordinary, rigorous scientific and mathematical training. Free from the cultural burden of a long-standing political tradition, application of these tools

¹³⁸ Penslar, Derek J. 2001. *Shylock's Children: Economics and Jewish Identity in Modern Europe*. Berkeley and Los Angeles: University of California Press.

¹³⁹ *Ibid.*, p. 56.

¹⁴⁰ *Ibid.*, pp. 81-4.

to those social problem through a science of economics¹⁴¹ they helped build must have seemed the most natural and accessible means of confronting academically the new range of challenges they were invited to address. While it was socially sophisticated Western European Jews like Albert Einstein, Wolfgang Pauli¹⁴², and Niels Bohr who helped make modern physics, it was the unwashed but upwardly mobile easterners that made modern economics.

More than any of those pioneers, Simon Kuznets typified that spirit. I have argued that what he brought to economics was, to a large extent, *not* a series of substantive political, economic or social commitments. Rather, he arrived from Kharkov with rigorous training in statistical and empirical methods and an earnest desire to understand the forces that had shaped and were shaping his life. His beloved cultural inheritance was an ability to see the economy and his own past with a *tabula* close to *rasa*: a rigorous empirical lens unburdened by preconceived theory. That, I think, is something of the resolution to the enigma of his life and work. He was committed to, inspired by, and grateful for, his past *precisely for the rigorous, scientific and universalistic perspective it lent him*.

And it is precisely this commitment that interested me in his story. Born to two atheist, culturally assimilated Jewish parents, I always resented the social expectations accompanying my Judaism, seeking always a secular universalist vision of my identity. Yet, I have come to realize the inevitability, and intellectual attraction, of my Jewish heritage as I

¹⁴¹ Of course there is no reason why economics should have assumed such a dominant role compared to other quantitative social sciences. Thus, a natural implication of my hypothesis is that Eastern European Jews should have had a similarly transformative quantifying impact on other potentially quantitative social sciences, such as political science and sociology. Paul Lazarsfeld is a leading example that would seem to confirm this conjecture, as founder of modern quantitative sociology, but neither quantitative evidence of the form made possible by the awards nor a strong personal knowledge of the field make it possible for me to test this hypothesis. It therefore remains as an interesting direction for future research.

¹⁴² Pauli's father converted to Catholicism before his birth, but came from a prominent Jewish family.

found so many of my fellow travelers in that struggle for universalism to be themselves born to atheist, culturally assimilated Jewish parents.

Of course, the story I have just told is explicitly and disproportionately shaped by my experience and by Kuznets's story, through which I have come to understand it. It is at best a provocative reflection and at worst self-indulgent speculation. Yet, I hold out some hope that it can be more the former than the latter. I believe that the story of the rebirth of economics as a mathematical science in the twentieth century cannot be, as it has in the past been, easily separated from the story of the Eastern European Jewish immigrants' struggle to understand political, social and economic affairs. Perhaps someday the pogroms, the great wave of Jewish immigration at the turn of the 20th century, the rise of German anti-Semitism, and the birth of the state of Israel will be seen as rivaling the Great Depression in having shaped modern economic thought. Only through future scholarship on this important neglected subject will we be able to tell.