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GERMAN MONETARY THEORY

1905-1933

BY

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TO LILAH

PREFACE

THE development of monetary theory in German literature during the past thirty years may profitably engage the attention of economists generally. In the first place, beginning with Knapp's challenging *State Theory of Money* in 1905, a spirited discussion arose as to the essential character of money and its value. Although the issues were not new, this preoccupation with metaphysical questions concerning money is without parallel in the history of economics. Portions of this literature are marred by polemics or vitiated by flagrant fallacies, but in the aggregate it yields definitely valuable results. The discussion of price level determinants, to which Part II of this book is devoted, presents some striking spectacles: the clash of quantity-theory, historical, institutional, and banking-school ideas; the rivalry of velocity and cash-balance approaches; the divergence of views upon the causal independence of velocity and upon the merits of general and special price indices. Because opinion upon these issues has been more evenly divided in Germany and Austria than elsewhere, we sometimes discover that the arguments are pressed farther, theoretical refinement being the gain and "logical conclusions" the drawback.

American and English students may be curious also as to the effects produced upon indigenous economic writing by the post-war inflation experiences. Here again a considerable part of the publication, particularly by lay pamphleteers, represents the pathological phases of theorizing, as might be expected from a period of popular excitement and confusion. I take account of this material briefly in Part III, but seek rather to compass fully the permanent results of serious discussion. It will be found that the purchasing power parity doctrine encountered a surprisingly vigorous opposition from the balance of payments school, but that the conflict contributed toward a synthesis. Finally, in Part IV, which treats the analysis of business cycles, there appear a number of ideas, widely accepted amongst monetary writers, which might almost be marked as "made in Germany"; or at least they were most widely propagated through the German literature. Such, for example, are the theories

of the "trailing bank rate," of "neutral money," and the emphasis upon economic innovations in cyclical variation.

The purposes of this book are two: to make available in summary form the content of a large literature from which many students are debarred by the obstacle of language or time, and to present critical comparisons and appraisals of its outcome in the light of monetary science generally. The term "German theory" indicates an organic whole characterized by a common language, but involving important writers outside the geographic area of Germany and Austria whose works belong to the German schools of thought. The nature of the subject matter and the magnitude of the undertaking have caused my critical observations to assume rather largely the deductive form, except in cases where empiric evidence is readily available in compact and unambiguous form. In the interest of fairness to the writers involved, I endeavor in most cases to hold the résumé of theories and the criticism separate. In each Part, I avoid, so far as possible, the introduction of my own judgment upon basic questions until a concluding summary chapter, leaving the issue unprejudiced until all the theorists can be reviewed. Criticism of each author takes on a rather too negative aspect in consequence of this method; but the advantage lies in clearing away difficulties peculiar to each author as the study progresses, so that the field may be clear at the end of each Part for a statement of positive results.

My greatest obligations as a student of economics belong to Professors F. H. Knight, F. W. Taylor, and F. W. Taussig. To the last I am indebted also for his benevolent and discerning guidance throughout the present undertaking; and to Professor A. P. Usher for his help during the process of publication. At Heidelberg, where the enquiry was begun during my tenure of a Sheldon Fellowship from Harvard University, I was aided by discussions with Professor Alfred Weber and Drs. Bergsträsser and Salin. I acknowledge with pleasure the suggestions made subsequently by European scholars elsewhere, Professor Gottfried Haberler, Dr. Oskar Morgenstern, and Dr. Melchior Palyi.

The greatest part of the reading and of the formulation of ideas has gone forward at Ann Arbor, where I have been encouraged and, at certain junctures, corrected by my associates in the University of Michigan: Professor R. G. Rodkey, Professor M. A. Copeland, and

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the late Dr. C. H. May. Professor I. L. Sharfman has liberally allowed me the maximum of free time and energy consistent with university teaching; to him I owe also the sincere respect of a student. More than anyone else, Professor Leonard L. Watkins has patiently considered with me the problems encountered in this study, indicating the way out of many a dilemma.

H. S. E.

ANN ARBOR, MICHIGAN
August, 1934

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ABBREVIATIONS OF TITLES — PERIODICALS AND SERIES

<i>Am. Ec. Rev.</i>	American Economic Review.
<i>Archiv</i>	Archiv für Sozialwissenschaft und Sozialpolitik.
<i>Ec. Jour.</i>	Economic Journal.
<i>Handb. der Staats.</i>	Handwörterbuch der Staatswissenschaften.
<i>Schm. Jhrb.</i>	Schmollers Jahrbuch, or Jahrbuch für Gesetzgebung.
<i>Jhrb. für N. & S.</i>	Jahrbuch für Nationalökonomie und Statistik.
<i>J. P. E.</i>	Journal of Political Economy.
<i>Q. J. E.</i>	Quarterly Journal of Economics.
<i>Verein</i>	Veröffentlichungen des Vereins für Sozialpolitik.
<i>Welt. Arch.</i>	Weltwirtschaftliches Archiv.
<i>Ztsch. für d. ges. Staats.</i>	Zeitschrift für die gesamte Staatswissenschaft.
<i>Ztsch. für Sozialw.</i>	Zeitschrift für Sozialwissenschaft.
<i>Ztsch. für Volksw. und Sozialp.</i>	Zeitschrift für Volkswirtschaft und Sozialpolitik.

BIBLIOGRAPHY

- ALTMANN, S. P. "Irving Fishers 'Die Kaufkraft des Geldes,'" *Jhrb. für N. & S.* 112, pp. 467-471.
- "Zur deutschen Geldlehre des XIX Jahrhunderts," *Die Entwicklung des deutschen Volkswirtschaftslehre im XIX Jahrhundert, Festgabe für Schmoller.* Leipzig, 1908, vol. 1, sec. 6.
- AMONN, ALFRED. *Objekt und Grundbegriffe der theoretischen Nationalökonomie.* 2nd ed., Leipzig, 1927.
- "Cassels System der theoretischen Nationalökonomie," *Archiv* 51, pp. 1-87, 322-341.
- "Wiesers Theorie der gesellschaftlichen Wirtschaft," *Archiv* 53, pp. 289-369, 653-701.
- ANDERSON, B. M. *The Value of Money.* New York, 1917.
- "Brokers' Loans and Bank Credit," *Chase Economic Bulletin*, vol. VIII, no. 4.
- ANDRÉADÈS, A. *History of the Bank of England.* London, 1909.
- ANGELL, J. W. *The Theory of International Prices.* Cambridge, Massachusetts, 1926.
- "Monetary Theory and Monetary Policy: Some Recent Discussions," *Q. J. E.* 39, pp. 266-299.
- ARISTOTLE. *Nicomachean Ethics.* Tr. by F. H. Peters, 15th ed., London, 1893.
- *Politics.* Tr. by Benjamin Jowett, Oxford, 1920.
- BALOGH, THOMAS. "Absorption of Credit by the Stock Exchange," *Am. Ec. Rev.* 20, pp. 658-663.
- BARBON, NICHOLAS. *A Discourse of Trade (1690).* A Reprint of Economic Tracts. Ed. by Jacob H. Hollander, Johns Hopkins Press, Baltimore, 1905.
- BASSETT, J. S. *A Short History of the United States.* New York, 1918.
- BECKERATH, HERBERT. *Die Markvaluta.* Jena, 1920.
- BEHNSEN, HENRY, and GENZMER, WERNER. *Die Folgen der Marktentwertung für uns und die anderen.* Leipzig, 1921.
- BEHRENS, WALTER G. *Das Geldschöpfungsproblem.* Jena, 1928.
- BENDIXEN, FRIEDRICH. *Das Inflationsproblem.* Stuttgart, 1917.
- *Das Wesen des Geldes.* 4th ed., Munich, 1926.
- *Geld und Kapital, Gesammelte Aufsätze.* 3rd ed., Jena, 1922.
- *Kriegsanleihen und Finanznot.* Jena, 1919.

- BENDIXEN (*continued*). *Währungspolitik und Geldtheorie im Lichte des Weltkrieges*. 2nd ed., Munich, 1919.
- "Bemerkungen zur Geldschöpfungslehre," *Jhrb. für N. & S.* 113, p. 133 ff.
- "Der Kampf um den Geldwert," *Ztsch. für Sozialw. N. F.* 4, pp. 583-590.
- "Fünf Jahre Geldtheorie," *Bankarchiv*, vol. x, no. 10, pp. 145-148.
- "Nominalismus und Metallismus," *Jhrb. für N. & S.* 113, pp. 217-228.
- "Vom theoretischen Metallismus (Kritik der Lehren von Karl Diehl)," *Jhrb. für N. & S.* 112, pp. 497-534.
- BIEL, GABRIEL. *Treatise on the Power and Utility of Money*. Reprinted by the University of Pennsylvania Press, Philadelphia, 1930.
- BIRCK, LAURITS V. *The Theory of Marginal Value*. London, 1922.
- BLOCH, HERBERT. *Die Marxsche Geldtheorie*. Jena, 1926.
- BOBER, M. M. *Karl Marx's Interpretation of History*. Cambridge, Massachusetts, 1927.
- BONAR, J. "Knapp's Theory of Money," *Ec. Jour.* 32, pp. 39-47.
- BONN, M. J. *The Stabilization of the Mark*. Chicago, 1922.
- "The Fall in the German Exchange," *Q. J. E.* 31, pp. 108-127.
- BORTKIEWICZ, LUDWIG. "Das währungspolitische Programm Otto Heyns," *Schm. Jhrb.* 42, pp. 735-752.
- "Der subjektive Geldwert," *Schm. Jhrb.* 44, pp. 153-190.
- "Die geldtheoretischen und währungspolitischen Konsequenzen des Nominalismus," *Schm. Jhrb.* 30, pp. 1311-1344.
- "Die Ursachen einer potenzierten Wirkung des vermehrten Geldumlaufs auf das Preisniveau," *Verein* 170, pp. 256-274.
- "Neue Schriften über die Natur und die Zukunft des Geldes," *Schm. Jhrb.* 45, pp. 621-647, 957-1000.
- "Valutapolitik auf neuer Grundlage," *Bankarchiv* 19, no. 8, p. 98 ff.
- BOSANQUET, CHARLES. *Practical Observations on the Report of the Bullion-Committee*. London, 1810.
- BRADFORD, F. A. *Money*. New York, 1928.
- BRAUN, FR. EDLER VON. *Wiedereinführung der Goldwährung*. Berlin, 1920.
- BROCK, FRITZ. "Zur Theorie der Konjunkturschwankungen," *Welt. Arch.* 35, pp. 417-444.
- BUDGE, SIEGFRIED. *Grundsätze der theoretischen Nationalökonomie*. Jena, 1925.
- "Zur Frage der Bankrate und des Geldwertes," *Archiv* 44, pp. 214-231.
- BURAWAY, JACOB. *Der Knappsche Nominalismus und seine Rechtfertigung*. Leipzig, 1929.

- BURCHARDT, FRITZ. "Entwicklungsgeschichte der monetären Konjunkturtheorie," *Welt. Arch.* 28, pp. 77-144.
- CANNAN, EDWIN. *Money*. 5th ed., London, 1926.
- "Knapp's State Theory of Money," *Economica* 14, pp. 212-216.
- CANTILLON, RICHARD. *Essai sur la Nature du Commerce en General*. Reprints from the 1st ed. of 1755, Boston, 1892.
- CARVER, T. N. "The Concept of an Economic Quantity," *Q. J. E.* 21, pp. 424-448.
- CASSEL, GUSTAV. *Das Stabilisierungsproblem*. Leipzig, 1926.
- *Fundamental Thoughts in Economics*. New York, 1925.
- *Germany's Power of Resistance*. New York, 1916.
- *Money and Foreign Exchange after 1914*. New York, 1923.
- *Theoretische Nationalökonomie*. 1st ed., Leipzig, 1918; 2nd ed. 1921.
- *The Theory of Social Economy*. 1st ed., New York, 1924; 2nd ed., London 1932.
- *The World's Monetary Problems*. London, 1921.
- "Abnormal Deviations in International Exchanges," *Ec. Jour.* 28, pp. 413-415.
- "International Trade, Capital Movements, and Exchanges," *Harr Foundation Lectures: Foreign Investments*. Chicago, 1928.
- "The Depreciation of the German Mark," *Ec. Jour.* 29, pp. 492-496.
- "The Depreciation of Gold," *Ec. Jour.* 27, pp. 346-354.
- "The Present Situation of the Foreign Exchanges," *Ec. Jour.* 26, pp. 61-65, 319-323.
- CHAMBERLIN, E. H. *The Theory of Monopolistic Competition*. Cambridge Massachusetts, 1933.
- COPELAND, M. A. "Money, Trade, and Prices — A Test of Causal Primacy," *Q. J. E.* 43, pp. 648-666.
- "Some Problems in the Theory of National Income," *J. P. E.* 40, pp. 1-51.
- D'ABERNON, VISCOUNT. "German Currency: its Collapse and Recovery, 1920-1926." *Jour. Royal Statistical Society* 90, pp. 1-40.
- DALBERG, RUDOLF. *Die Entthronung des Goldes*. Stuttgart, 1916.
- *Die Entwertung des Geldes*. 2nd ed., Berlin, 1919.
- *Finanzgesundheit aus Währungsnot*. Berlin, 1920.
- DEL MAR, ALEXANDER. *The Science of Money*. New York, 1896.
- Die Kredit-Wirtschaft*. Leipzig, 1927.

- DIEHL, KARL. *Theoretische Nationalökonomie*. Jena, 1927.
- *Über Fragen des Geldwesens und der Valuta während des Krieges und nach dem Kriege*. Jena, 1918.
- "Bendixens 'Währungspolitik,'" *Bankarchiv* 16, pp. 6-13.
- "Dalbergs 'Die Entwertung des Geldes,'" *Jhrb. für N. & S.* 115, pp. 1-17.
- "Über Cassels System der theoretischen Sozialökonomie," *Welt. Arch.* 28, pp. 161-185.
- "Unser Geldwesen nach dem Kriege," *Jhrb. für N. & S.* 107, pp. 721-741.
- "Wagemanns 'Allgemeine Geldlehre,'" *Welt. Arch.* 21, pp. 1-10.
- DOBLER, FRITZ. *Kritische Untersuchungen zur Theorie der Kaufkraftparitäten*. Tübingen, 1928.
- DÖRING, HERBERT. *Die Geldtheorien seit Knapp*. 2nd ed., Greifswald, 1922.
- DULLES, ELEANOR L. *The French Franc, 1914-1928*. New York, 1929.
- EGGENSCHWYLER, W. "Die Kaufkraft des Geldes, Ein Versuch mit untauglichen Mitteln," *Archiv* 36, pp. 213-233, 548-576.
- EGNER, ERICH. *Versuch einer autonomen Lehre der Währungspolitik*. Leipzig, 1928.
- EITEMAN, W. J. "Economics of Brokers' Loans," *Am. Ec. Rev.* 22, pp. 66-77.
- ELSTER, KARL. *Die deutsche Not im Lichte der Währungstheorie*. Jena, 1921.
- *Die deutsche Valutapolitik nach dem Kriege*. Stuttgart, 1919.
- *Die Seele des Geldes*. Jena, 1920.
- "Die Grundgleichung der Geldtheorie," *Jhrb. für N. & S.* 115, pp. 1-17.
- "Die Staatliche Theorie des Geldes," *Jhrb. für N. & S.* 111, pp. 80-93.
- "'Kaufkraft' und 'Geltung' des Geldes," *Jhrb. für N. & S.* 115, pp. 243-249.
- "Vom Werte, den das Geld nicht hat," *Jhrb. für N. & S.* 116, pp. 507-526.
- "Wertmesser und Einheit," *Jhrb. für N. & S.* 117, pp. 322-330.
- "Zur Theorie des Paritätsvertrages," *Jhrb. für N. & S.* 116, pp. 414-425.
- ENGLÄNDER, OSKAR. *Theorie der Volkswirtschaft*, vol. II, "Geld und Kapital," Vienna, 1930.
- EFFICH, ERICH. *Geld: eine sozialpsychologische Studie*. Munich, 1921.
- ESSLEN, JOSEPH. *Die Valutasölle der Gegenwart*. Jena, 1922.
- EUCKEN, WALTER. *Kritische Betrachtungen zum deutschen Geldproblem*. Jena, 1923.
- "Die Ursachen der potenzierten Wirkung des vermehrten Geldumlaufs auf das Preisniveau," *Jhrb. für N. & S.* 125, pp. 289-309.
- "Kredit und Konjunktur," *Verein* 175, pp. 287-305.

- EULENBURG, FRANZ. *Das Geld im Kriege und Deutschlands finanzielle Rüstung*. Leipzig, 1915.
- "Die Preisrevolution seit dem Kriege," *Jhrb. für N. & S.* 116, pp. 289-338.
- "Inflation," *Archiv* 45, pp. 477-526.
- FETTER, F. W. "Some Neglected Aspects of Gresham's Law," *Q. J. E.* 46, pp. 480-495.
- FISHER, IRVING. *The Purchasing Power of Money*. 2nd ed., New York, 1922.
- FLUX, A. W. *The Foreign Exchanges*. London, 1924.
- FOSTER, W. T., and CATCHINGS, W. *Money*. Boston, 1927.
- FULLARTON, JOHN. *On the Regulation of Currencies*. 2nd ed., London, 1845.
- FURNESS, W. H. *The Island of the Stone Money*. Philadelphia, 1910.
- GAERTNER, FRIEDRICH. *Vom Gelde und der Geldentwertung*. 2nd ed., Munich, 1922.
- GARVER, F. B., and HANSEN, A. H. *Principles of Economics*. Boston, 1928.
- GEILER, HANS. "Geld und Recht," *Ztsch. für d. ges. Staats.* 81, pp. 320-322.
- GENZMER, WERNER. *Kritische Betrachtungen zur Nominalistischen Geldtheorie*. Dresden, 1917.
- GENZMER, W., and BEHNSEN, HENRY. *Die Folgen der Marktentwertung für uns und die anderen*. Leipzig, 1921.
- GERBER, HANS. *Geld und Staat*. Jena, 1926.
- GERNGROSS, PAUL. *Beiträge zu einer wirtschaftlichen Theorie des Geldes*. Vienna, 1913.
- GONNARD, RENÉ. *Précis d'économie monétaire*. Paris, 1930.
- GRAHAM, F. D. *Exchange, Prices, and Production in Hyper-inflation: Germany, 1920-1923*. Princeton, 1930.
- GREGORY, T. E. *Foreign Exchange before, during, and after the War*. 3rd ed., London, 1925.
- GREIDANUS, TJARDUS. *The Value of Money*. London, 1932.
- GRUNTZEL, JOSEF. *Der Geldwert*. Stuttgart, 1919.
- *Wert und Preis*. Munich, 1916.
- GUTMANN, FRANZ. "Staatliche Geldtheorie," *Hdwb. der Staats.*, 4th ed., vol. IV, Jena, 1927, pp. 752-762.
- HABER, FRANZ. *Untersuchungen über Irrtümer moderner Geldverbesserer*. Jena, 1926.
- HABERLER, GOTTFRIED. "Albert Hahns 'Volkswirtschaftliche Theorie des Bankkredits,'" *Archiv* 56, pp. 803-820.

- HABERLER (*continued*). "Die Kaufkraft des Geldes und die Stabilisierung der Wirtschaft," *Schm. Jhrb.* 55, pp. 993-1023.
- "Die Kredittheorie der Cambrdiger Schule," *Archiv* 62, pp. 251-270.
- "Kritische Bemerkungen zu Schumpeters Geldtheorie," *Ztsch. für Volksw. und Sozialp^oN. F.* 4, pp. 645-668.
- "Money and the Business Cycle," *Harris Foundation Lectures: Gold and Monetary Stabilization*. Chicago, 1932, pp. 43-74.
- HAHN, L. ALBERT. *Geld und Kredit*. Tübingen, 1924.
- *Geld und Kredit, Neue Folge*. Tübingen, 1929.
- *Goldvorteil und Goldvorurteil*. Frankfurt, 1924.
- *Volkswirtschaftliche Theorie des Bankkredits*. 1st ed., Tübingen, 1920; 2nd ed., Tübingen, 1924; 3rd ed., Tübingen, 1930.
- "Die Goldpolitik der Bank von Schweden während des Krieges," *Schm. Jhrb.* 41, pp. 615-628.
- "Handelsbilanz, Zahlungsbilanz, Valuta, Güterpreise," *Archiv* 48, pp. 596-614.
- "Heyns 'Zur Valutafrage,'" *Archiv* 49, pp. 225-227.
- "Kredit," *Hdwb. der Staats.* 4th ed., vol. v, Jena, 1923, pp. 944-953.
- "Mises 'Theorie des Geldes und der Umlaufsmittel,'" *Archiv* 53, pp. 509-516.
- "Statische und dynamische Wechselkurse," *Archiv* 49, pp. 761-779.
- "Von der Kriegs- zur Friedenswährung," *Archiv, Ergänzungsheft* 14, pp. 1-64.
- "Zur Frage des sogenannten 'Vertrauens in die Währung,'" *Archiv* 52, pp. 289-316.
- "Zur Theorie des Geldmarktes," *Archiv* 51, pp. 289-321.
- HALES, JOHN (W. S.), *A Discourse of the Common Weal of this Realm of England*. Reprinted, Cambridge, England, 1893.
- HALM, GEORG. "Das Zinsproblem am Geld- und Kapitalmarkt," *Jhrb. für N. & S.* 125, pp. 1-34, 97-112.
- HANSEN, ALVIN. *Business Cycle Theory*. Boston, 1927.
- HANTOS, ELEMÉR. *Das Geldproblem in Mitteleuropa*. Jena, 1925.
- *Die Zukunft des Geldes*. Stuttgart, 1921.
- HARDY, C. O. *Credit Policies of the Federal Reserve System*. Washington, 1932.
- "Savings, Investment, and Business Cycles," *J. P. E.* 39, pp. 390-400.
- HAWTREY, R. G. *Currency and Credit*. 2nd ed., London, 1923; 3rd ed., London, 1930.

- *Monetary Reconstruction*. London, 1923.
- *The Art of Central Banking*. London, 1932.
- "The State Theory of Money," *Ec. Jour.* 35, pp. 251-255.
- HAYEK, FRIEDRICH A. *Geldtheorie und Konjunkturtheorie*. Vienna, 1929.
- *Prices and Production*. London, 1931.
- "A Rejoinder to Mr. Keynes," *Economica* 34, pp. 398-403.
- "Das intertemporale Gleichgewichtssystem und die Bewegungen des 'Geldwertes,'" *Welt. Arch.* 28, pp. 33-76.
- "Einige Bemerkungen über das Verhältnis der Geldtheorie zur Konjunkturtheorie," *Verein* 173, ii, 247, 295.
- "Kapitalaufzehrung," *Welt. Arch.* 36, pp. 86-108.
- "Reflections on the Pure Theory of Money of Mr. J. M. Keynes," *Economica* 33, pp. 270-295.
- "The Paradox of Saving," *Economica* 32, pp. 125-169.
- HELFFERICH, KARL. *Das Geld*. 4th ed., Leipzig, 1919.
- *Money*. New York, 1927.
- "Aussenhandel und Valutaschwankungen," *Schm. Jhrb.* 22, pp. 353-408.
- HENDERSON, H. D. *Supply and Demand*. New York, 1922.
- HEPBURN, A. B. *A History of the Currency in the United States*. New York, 1915.
- HERZFELDER, EDMUND. *Kreditkontrolle*. Berlin, 1930.
- HEYN, OTTO, *Erfordernisse des Geldes*. Leipzig, 1912.
- *Über Geldschöpfung und Inflation*. Stuttgart, 1921.
- *Unser Geldwesen nach dem Kriege*. Stuttgart, 1916.
- "Der Goldschatz der Reichsbank und seine Bedeutung im Kriege und nach dem Kriege," *Ztsch. für Sozialw. N. F.* 7, pp. 27-40.
- "Erwiderung zu Bëndixens 'Der Kampf um den Geldwert,'" *Ztsch. für Sozialw. N. F.* 4, pp. 591-593.
- "Visserings Währungsreformvorschläge," *Bankarchiv* 19, nos. 12-13.
- "Wertbasis und Deckung des Papiergeldes," *Bankarchiv* 19, no. 18, pp. 209-213, 221-224.
- "Zur Frage der Eliminierung des Wertproblems aus der Geldtheorie," *Ztsch. für Sozialw. N. F.* 4, pp. 29-39.
- "Zur Verteidigung der Chartaltheorie des Geldes," *Jhrb. für N. & S.* 106, pp. 776-804.
- HILDEBRAND, RICHARD. *Über das Wesen des Geldes*. Jena, 1914.
- HILFERDING, RUDOLPH. *Das Finanzkapital*. Vienna, 1927.

- HIRSCH, JULIUS. *Die deutsche Währungsfrage*. Jena, 1924.
- HIRSCH, WILLY. *Grenznutzentheorie und Geldwerttheorie unter besonderen Berücksichtigung der "österreichischen" Schule*. Jena, 1928.
- HOLDSWORTH, J. T. *Money and Banking*. 3rd ed., New York, 1923.
- HOLTROP, M. W., "Theories of the Velocity of Circulation of Money in Earlier Economic Literature," *Ec. Jour.*, *Economic History Series*, vol. IV, no. 1, pp. 502-524.
- HONEGGER, HANS. *Der schöpferische Kredit*. Jena, 1929.
- HOOVER, C. B. "Brokers' Loans and Bank Deposits," *J. P. E.* 37, pp. 713-727.
- JANČOVICH, BELA VON. *Beiträge zur Theorie des Geldes*. Vienna, 1926.
- JEVONS, W. S. *Money and the Mechanism of Exchange*. New York, 1893.
- *The Theory of Political Economy*. London, 1871.
- JÖHR, ADOLF. "Kredit und Konjunktur," *Verein* 175, pp. 306-316.
- KÄMMERER, G. H. *Geld: Eine genetische Studie*. Berlin, 1921.
- KATZENELLENBAUM, S. S. *Russian Currency and Banking, 1914-1924*. London, 1925.
- KAULLA, RUDOLPH. *Die Grundlagen des Geldwerts*. Stuttgart, 1920.
- KEILHAU, WILHELM. "The Valuation Theory of Exchange," *Ec. Jour.* 35, pp. 221-232.
- KEMÉNY, GEORG. *Die fremden Wechselkurse und die Umwälzung der internationalen Wirtschaftsbeziehungen*. Essen, 1921.
- KERSCHAGL, RICHARD. *Die Geldprobleme von heute*. Munich, 1922.
- *Die Lehre vom Geld in der Wirtschaft*. Vienna, 1921.
- *Theorie des Geldes und der Geldwirtschaft*. Jena, 1923.
- "Überblick über das Schrifttum des Geldwesens von 1914 bis 1920," *Ztsch. für Volksw. und Socialp. N. F.* 1, pp. 126-127.
- "Universalismus und Individualismus in der Methodik der Geldtheorie," *Jhrb. für N. & S.* 117, pp. 211-223.
- KEYNES, J. M. *A Tract on Monetary Reform*. New York, 1924.
- *A Treatise on Money*. New York, 1930.
- "A Rejoinder [to Mr. Robertson]," *Ec. Jour.* 41, pp. 412-423.
- "A Reply to Dr. Hayek," *Economica* 34, pp. 387-398.
- KINLEY, DAVID. *Money*. New York, 1904.
- KNAFF, G. F. *Staatliche Theorie des Geldes*. 4th ed., Munich, 1923.
- *The State Theory of Money*. London, 1924.
- "Die Währungsfrage vom Staate aus betrachtet," *Schm. Jhrb.* 31, pp. 1527-1538.

- Discussion, *Verein* 132, pp. 559-560.
- "Erläuterungen zur Staatlichen Theorie des Geldes," *Schm. Jhrb.* 30, pp. 1691-1703.
- "Staatliche Geldtheorie," *Hdwb. der Staats.* 4th ed., vol. IV, Jena, 1927, pp. 752-762.
- KNIGHT, F. H. *Risk, Uncertainty and Profit*. Boston, 1921.
- "Professor Fisher's Interest Theory: A Case in Point," *J. P. E.* 39, pp. 176-212.
- KÖNIG, HEINRICH. *Die Befestigung der Kaufkraft des Geldes*. Bonn, 1922.
- KORANYI, KARL. "Zahlungsbilanz, Kaufkraft, und Wechselkurse," *Welt. Arch.* 26, pp. 260-293.
- LAMPE, ADOLF. *Zur Theorie des Sparprozesses und der Kreditschöpfung*. Jena, 1926.
- LANGELÜTKE, H. *Tauschbank und Schwundgeld als Wege zur sinnlosen Wirtschaft*. Jena, 1928.
- LANSBURGH, ALFRED. *Die Kriegskostendeckung und ihre Quellen*. Berlin, 1915.
- *Vom Gelde: Briefe eines Bankdirektors an seinen Sohn*. Berlin, 1921.
- "Das Gold im Kriege," *Die Bank*, 1916, pp. 185-195, 371-383.
- "Das Schicksal der deutschen Währung," *Die Bank*, 1919, pp. 635-665.
- "Die Politik der Reichsbank und die Reichsschatzanweisungen nach dem Kriege," *Verein* 166.
- "Die Weltgeldeigenschaft des Goldes," *Die Bank*, 1919, pp. 833-849, 923-935.
- "Die Wiederherstellung der Landeswährung," *Die Bank*, 1918, pp. 699-711, 781-795.
- LAUGHLIN, J. L. *Money and Prices*. New York, 1919.
- LAWRENCE, J. S. *The Stabilization of Prices*. New York, 1928.
- LEAGUE OF NATIONS, Series of Publications, II. Economic and Financial 1931. II. A. 21; Official No.: A. 22. 1931 II. A.* *Course and Phases of the World Economic Depression*. Geneva, Switzerland, and Boston, Massachusetts, 1931.
- LEDERER, EMIL. "Der Zirkulationsprozess als zentrales Problem der ökonomischen Theorie," *Archiv* 56, pp. 1-25.
- LEDERER, EMIL, and MARSCHAK, JAKOB. "Größenordnungen des deutschen Geldsystems," *Archiv* 67, pp. 385-402.
- LEHFELDT, R. A. *Money*. London, 1926.
- LEXIS, WILHELM. "Die Knapp'sche Geldtheorie," *Jhrb. für N. & S.* 87, pp. 534-545.

- LIEFMANN, ROBERT. *Die Geldvermehrung im Weltkrieg und die Beseitigung ihrer Folgen*, Stuttgart, 1918.
- *Geld und Gold*. Stuttgart, 1916.
- *Grundsätze der Volkswirtschaftslehre*. Stuttgart, 1919.
- "Die Entstehung des Preises aus subjektiven Wertschätzungen," *Archiv* 34, pp. 1-54, 406-469.
- LÖWE, ADOLF. "Über den Einfluss monetärer Faktoren auf den Konjunkturzyklus," *Verein* 173, ii, 355-370.
- LOTZ, WALTER. *Das Papiergeld*. Berlin, 1920.
- "Diskonto und Diskontopolitik," *Hdwb. der Staats.*, 4th ed., vol. III, Jena, 1926, pp. 247-258.
- "G. F. Knapps neue Geldtheorie," *Schm. Jhrb.* 30, pp. 777-793, 1213-1252.
- "Valutafrage und öffentliche Finanzen in Deutschland," *Verein* 164.
- LOUNSBURY, R. H. "Velocity Concepts and Prices," *Q. J. E.* 46, pp. 34-67.
- MACHLUP, FRITZ. *Börsenkredit, Industriekredit, und Kapitalbildung*. Vienna, 1931.
- *Die Goldkernwährung*. Halberstadt, 1925.
- MAHR, ALEXANDER. "Zur Theorie der Wechselkurse," *Welt. Arch.* 26, pp. 223-259.
- MAKAI, ERNST. *Währungsstudien mit besonderer Rücksicht auf Österreich-Ungarn*. Stuttgart, 1917.
- MANNSTAEDT, HEINRICH. *Ein kritischer Beitrag zur Theorie des Bankkredits*. Jena, 1927.
- MARGET, A. W. "A Further Note on Holtrop's Formula for the 'Coefficient of Differentiation' and Related Concepts," *J. P. E.* 41, pp. 237-241.
- "Hawtrey's 'Gold Standard in Theory and Practice,'" *Q. J. E.* 42, pp. 140-152.
- "Leon Walras and the 'Cash-Balance' Approach to the Problem of the Value of Money," *J. P. E.* 39, pp. 569-600.
- "The Relation between the Velocity of Circulation of Money and the 'Velocity of Circulation of Goods,'" *J. P. E.* 40, pp. 289-313, 477-512.
- MARSCHAK, JAKOB. "Die Verkehrsgleichung," *Archiv* 52, pp. 244-284.
- "Volksvermögen und Kassenbedarf," *Archiv* 68, pp. 385-419.
- MARSCHAK, JAKOB, and LEDERER, EMIL. "Größenordnungen des deutschen Geldsystems," *Archiv* 67, pp. 385-402.
- MARSHALL, ALFRED. *Money, Credit, and Commerce*. London, 1923.
- *Official Papers*. London, 1926.

- MARX, KARL. *Capital*. Tr. by Moore and Aveling, London, 1887.
- MARZELL, HANS. *Das Kapitalzinsproblem im Lichte des Kreislaufs der Waren und des Geldes*. Jena, 1927.
- MENANDIER, J. "Knapps Staatliche Theorie des Geldes," *Zeitschrift für Numismatik* 26, p. 677.
- MILDSCHUH, WILIBALD. "Geschichtliche Entwicklung der Geldtheorie," *Hdwb. der Staats.* 4th ed., vol. IV, Jena, 1927, pp. 718-729.
- MILL, J. STUART. *Principles of Political Economy*. Ed. by Ashley, London, 1909.
- MISES, LUDWIG. *Die Ursachen der Wirtschaftskrise*. Tübingen, 1931.
- *Geldwertstabilisierung und Konjunkturpolitik*. Jena, 1928.
- *Nation, Staat und Wirtschaft*. Vienna, 1919.
- *Theorie des Geldes und der Umlaufsmittel*. 1st ed., Munich, 1912; 2nd ed., Munich, 1924.
- "Die allgemeine Teuerung im Lichte der theoretischen Nationalökonomie," *Archiv* 37, pp. 557-577.
- "Die geldtheoretische Seite des Stabilisierungsproblems," *Verein* 164, Pt. II.
- Discussion, *Verein* 170, pp. 275-280.
- "The Foreign Exchange Policy of the Austro-Hungarian Bank," *Ec. Jour.* 19, pp. 201-211.
- "Zur Klassifikation der Geldtheorien," *Archiv* 44, pp. 198-212.
- MOELLER, HERO. *Die Lehre vom Gelde*. Leipzig, 1925.
- MOLL, BRUNO. *Die Logik des Geldes*. 2nd ed., Munich, 1922.
- *Die modernen Geldtheorien und die Politik der Reichsbank*. Stuttgart, 1917.
- MONROE, A. E. *Early Economic Thought*. Cambridge, Massachusetts, 1927.
- *Monetary Theory before Adam Smith*. Cambridge, Massachusetts, 1923.
- MOULTON, H. G. "Commercial Banking and Capital Formation," *J. P. E.* 26, pp. 705-731.
- MOULTON, H. G., and MCGUIRE, CONSTANTINE E. *Germany's Capacity to Pay*. New York, 1923.
- MÜLLER, HUGO. *Wechselkurs und Güterpreise*. Jena, 1926.
- NEISSER, HANS. *Der Tauschwert des Geldes*. Jena, 1928.
- "Der Kreislauf des Geldes," *Welt. Arch.* 33, pp. 365-408.
- "Die alte und die neue Reichsbank," *Strukturwandelungen der deutschen Volkswirtschaft*, 2nd ed., Berlin, 1929, ii, 297-331.
- "Notenbankfreiheit." *Welt. Arch.* 32, pp. 446-461.

- NEUSTÄTTER, HANNA. *Schwedische Währung während des Weltkrieges*. Munich, 1920.
- NICHOLSON, J. S. *A Treatise on Money and Essays on Monetary Problems*. 3rd ed., London, 1895.
- NOGARO, BERTRAND. *Modern Monetary Systems*. London, 1927.
- NUSSBAUM, ARTHUR. *Das Geld in Theorie und Praxis des deutschen und ausländischen Rechts*. Tübingen, 1925.
- OHLIN, BERTIL. "Ungelöste Probleme der gegenwärtigen Krisis," *Welt. Arch.* 36, pp. 1-23.
- PALYI, MELCHIOR. *Romantische Geldtheorie*. Tübingen, 1916.
- "Das Zahlungsbilanzausgleich bei einseitigen Wertübertragungen," *Archiv* 56, pp. 302-338.
- "Der Streit um die Staatliche Theorie des Geldes," *Schw. Jhrb.* 45, pp. 533-578, 649-694.
- "Die Zahlungsbilanz der V. S. von Amerika als Gläubigerland," *Verein* 174, pp. 223-300.
- "Diehls 'Über Fragen,'" *Ztsch. für Sozialw. N. F.* 10, pp. 484-485.
- "Heyns 'Die deutsche Valuta,'" *Archiv* 50, p. 269.
- "Molls 'Logik des Geldes,'" *Archiv* 42, pp. 981-984.
- Referat, *Verein* 170, pp. 249-255, 320 ff.
- "Ungelöste Fragen der Geldtheorie," *Festgabe für Lujo Brentano*, vol. II, *Der Stand der Forschung*, Munich, 1925, pp. 457-517.
- PHILIPPOVICH, EUGEN. *Grundriss der politischen Ökonomie*. 18th ed., Tübingen, 1923.
- PHILLIPS, C. A. *Bank Credit*. New York, 1920.
- FIGOU, A. C. *Essays in Applied Economics*. London, 1923.
- *Industrial Fluctuations*. London, 1927.
- PLATO. *Laws*. Tr. by Benjamin Jowett, Oxford, 1892.
- *The Republic*. Tr. by Benjamin Jowett. 3rd ed., Oxford, 1908.
- POHLE, LUDWIG. *Das Problem der Valuta-Entwertung*. Dresden, 1919.
- *Geldentwertung, Valutafrage, und Währungsreform*. Leipzig, 1920.
- PRION, WILLI. *Inflation und Geldentwertung*. Berlin, 1919.
- REED, H. L. *Federal Reserve Policy, 1921-1930*. New York, 1930.
- REICHSBANK. *Die Reichsbank, 1901-1925*. Berlin, 1926.
- REISCH, RICHARD. "Das Kreditproblem in der Volkswirtschaft," *Zeitschrift für Nationalökonomie* 3, pp. 1-22.
- "Rückwirkungen der Börsenspekulation auf den Kreditmarkt," *Zeitschrift für Nationalökonomie* 1, pp. 205-221.

- RICARDO, DAVID. *Economic Essays*. Edited by A. C. K. Gonner, London, 1923.
- RICHTER-ALTSCHAEFFER, HANS. "Some Theoretical Aspects of Stock Market Speculation," *J. P. E.* 39, p. 231.
- ROBERTSON, D. H. *Banking Policy and the Price Level*. London, 1926.
- *Money*. 1st ed., New York, 1922; 2nd ed., New York, 1929.
- "A Note on the Theory of Money," *Economica* 41, pp. 243-247.
- "Mr. Keynes' Theory of Money," *Ec. Jour.* 43, pp. 395-411.
- RÖMER, GEORG. *Die Lehre vom Wesen des Geldes nach Knapp und Bendixen*. Giessen, 1925.
- RÖPKE, WILHELM. "Auslandskredite und Konjunktur," *Verein* 173, ii, 213-247.
- *Die Konjunktur*. Jena, 1922.
- *Die Theorie der Kapitalbildung*. Tübingen, 1929.
- "Kredit und Konjunktur," *Jhrb. für N. & S.* 126, pp. 243-285.
- ROGERS, JAMES H. *Stock Speculation and the Money Market*. Columbia, Missouri, 1927.
- *The Process of Inflation in France, 1914-1927*. New York, 1929.
- ROSCH, CARL. *Kreditinflation und Wirtschaftskrisen*. Jena, 1927.
- SALIN, EDGAR. *Staatliche Kreditpolitik*. Tübingen, 1928.
- "Die Entthronung des Geldes: Bemerkungen zu Keynes' 'A Tract on Monetary Reform,'" *Schw. Jhrb.* 48, pp. 95-112.
- SANGER, C. P. "Staatliche Theorie des Geldes," *Ec. Jour.* 16, pp. 266-267.
- SCHACHT, HJALMAR. *The Stabilization of the Mark*. London, 1927.
- SCHLESINGER, KARL. *Die Veränderungen des Geldwertes im Kriege*. Vienna, 1916.
- *Theorie der Geld- und Kreditwirtschaft*. Munich, 1914.
- SCHMITT, ALFONS. *Kreditpolitik und Konjunkturpolitik in Theorie und Praxis*. Jena, 1932.
- SCHUMPETER, JOSEPH. *Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie*. Leipzig, 1908.
- *Theorie der wirtschaftlichen Entwicklung*. 1st ed., Munich, 1912; 2nd ed., Munich, 1926; 3rd ed., Munich, 1931.
- "Das Sozialprodukt und die Rechenpfennige," *Archiv* 44, pp. 627-715.
- "Die Wellenbewegung des Wirtschaftslebens," *Archiv* 39, pp. 1-32.
- "Kreditkontrolle," *Archiv* 54, pp. 288-328.
- "The Explanation of the Business Cycle," *Economica* 21, pp. 286-312.

- SCHWIEDLAND, E. "Kerschagls 'Die Geldproblem von heute,'" *Ec. Jour.* 32, pp. 368-369.
- "Kerschagls 'Die Lehre vom Gelde in der Wirtschaft,'" *Ec. Jour.* 32, p. 529.
- SCOTT, W. A. *Money and Banking*. 5th ed., New York, 1916; 6th ed., New York, 1926.
- SENIOR, N. W. *Three Lectures on the Value of Money*, delivered before the University of Oxford in 1829. London, 1840.
- SEWELL, HANNAH R. "The Theory of Value before Adam Smith," *Publ. of the Am. Ec. Ass.*, Third Series, vol. II, no. 3.
- SHAW, WILLIAM A. *History of Currency*. London, 1895.
- SIMMEL, GEORG. *Philosophie des Geldes*. 4th ed., Leipzig, 1922.
- SINGER, KURT. *Das Geld als Zeichen*. Jena, 1920.
- SLICHTER, SUMNER H. *Modern Economic Society*. New York, 1931.
- SMITH, ADAM. *An Enquiry into the Nature and Causes of the Wealth of Nations*. Ed. by Cannan, London, 1904.
- SODA, KIICHIRO. *Geld und Wert*. Tübingen, 1909.
- "Die neue Knapp'sche Geldtheorie und das Wesen des Geldes," *Jhrb. für N. & S.* 89, pp. 336-355, 620-655.
- SOMARY, FELIX. *Bankpolitik*. Tübingen, 1915.
- Referat, *Verein* 170, pp. 244-249.
- Sozialisierungskommission, Verhandlungen über Reparationsfragen*, vol. III, "Stabilisierung der Währung," Berlin, 1922.
- SPANN, OTHMAR. *Theorie der Preisverschiebung als Grundlage zur Erklärung der Teuerung*. Vienna, 1913.
- "Bemerkungen zu Fishers Geldlehre," *Schm. Jhrb.* 41, p. 449.
- SPIETHOFF, ARTHUR. "Krisen," *Hdwb. der Staats.* 4th ed., vol. VI, Jena, 1925, pp. 8-90.
- SPRAGUE, O. M. W. *History of Crises under the National Bank System*. National Monetary Commission Reports, vol. v, Washington, 1911.
- SRAFFA, PIERO. "Dr. Hayek on Money and Capital," *Ec. Jour.* 42, pp. 42-54.
- STAMP, JOSIAH. *The Present Position of Monetary Science*. Manchester, 1932.
- STEFFINGER, LUDWIG. *Wert und Geld*. Tübingen, 1918.
- STEUART, JAMES. *Works*. London, 1805.
- STRIGL, RICHARD. "Die Produktion unter dem Einflusse einer Kreditexpansion," *Verein* 173, II, 185-213.
- STUCKEN, RUDOLF. *Die Konjunkturen im Wirtschaftsleben*. Jena, 1932.
- *Theorie der Konjunkturschwankungen*. Jena, 1926.

- "Neue deutsche Konjunkturliteratur," *Ztsch. für d. ges. Staats.* 86, pp. 143-150.
- "Weitere deutsche Konjunkturliteratur," *Ztsch. für d. ges. Staats.* 87, pp. 556-562.
- TAUSSIG, F. W. *International Trade.* New York, 1927.
- *Principles of Economics.* 2nd ed., New York, 1917; 3rd ed., New York, 1922.
- "International Trade under Depreciated Paper," *Q. J. E.* 31, pp. 380-404.
- TAYLOR, F. M. *Chapters on Money.* Ann Arbor, Michigan, 1906.
- *Principles of Economics.* 9th ed., New York, 1925.
- *Some Leading Problems in Economic Theory.* 3rd ed., Ann Arbor, Michigan, 1921.
- TIMOSHENKO, V. P. *The Role of Agricultural Fluctuations in the Business Cycle.* Ann Arbor, Michigan, 1930.
- TURGOT, A. R. J. *The Formation and Distribution of Riches.* (1770). Ed. by Ashley, New York, 1898.
- UNITED STATES DIRECTOR OF THE MINT. *Annual Report.* Washington, 1914.
- UNITED STATES SENATE, Commission of Gold and Silver Inquiry, Foreign Currency and Exchange Investigation, Serial 9, vol. 1, *European Currency and Finance.* Washington, 1925.
- VAN SICKLE, JOHN. "The Fallacy of a Capital Levy," *J. P. E.* 34, pp. 181-195.
- VEREIN FÜR SOZIALPOLITIK, "Beiträge zur Wirtschaftstheorie," Pt. II. "Konjunkturforschung und Konjunkturtheorie," *Schriften*, vol. 173, Munich, 1928.
- "Kredit und Konjunktur," *Schriften*, vol. 175, Munich, 1929.
- "Verhandlung über die theoretische und ökonomisch-technische Seite des Währungsproblems," *Schriften*, vol. 170, Munich, 1925, pp. 242-326.
- VOIGT, ANDREAS. "Die Staatliche Theorie des Geldes," *Ztsch. für d. ges. Staats.* 62, pp. 317-340.
- WAGEMANN, ERNST. *Allgemeine Geldlehre.* Berlin, 1923.
- *Economic Rhythm.* New York, 1930.
- WALKER, F. A. *Money, Trade and Industry.* New York, 1878.
- WALRÉ DE BORDES, J. VAN. *The Austrian Crown.* London, 1924.
- WENLEY, R. M. *Kant and his Philosophical Revolution.* Edinburgh, 1910.
- WHALE, P. BARRETT. *Joint Stock Banking in Germany.* London, 1930.
- "Helfferich's 'Money,'" *Economica* 21, pp. 369-373.
- WHITE, HORACE. *Money and Banking.* 5th ed., Boston, 1914.

- WICKSELL, KNUT. *Geldsins und Güterpreise*. Jena, 1898.
- *Vorlesungen über Nationalökonomie auf Grundlage des Marginalprinzips* vol. II, "Geld und Kredit," Jena, 1922.
- "Der Bankzins als Regulator der Warenpreise," *Jhrb. für N. & S.* 68, p1 228-243.
- "Gold after the War in Relation to Inflation and the Foreign Exchanges," *Ec. Jour.* 28, pp. 409-412.
- "Hinauf mit dem Bankraten!" *Archiv* 41, pp. 745-757.
- "International Freights and Prices," *Q. J. E.* 32, pp. 404-410.
- "Professor Cassels nationalökonomisches System," *Schw. Jhrb.* 52, p1 771-808.
- "The Influence of the Rate of Interest on Prices," *Ec. Jour.* 17, pp. 213 220.
- WIESER, FRIEDRICH. *Natural Value*. London, 1893.
- *Social Economics*. New York, 1927.
- "Der Geldwert und seine Veränderungen," *Verein* 132.
- "Geld: Theorie des Geldes, Allgemeine Theorie des Geldes," *Hdwb. de Staats.*, 4th ed., vol. IV, Jena, 1927, pp. 681-717.
- "Über die Messung der Veränderungen des Geldwertes," *Verein* 132.
- WILLIAMS, J. H. "Foreign Exchange, Prices, and the Course of International Trade," *Annals of the American Academy* 89, pp. 197-210.
- "Foreign Exchange under Depreciated Paper," *Jour. Am. Bankers' Assn* 14, pp. 492-494.
- "German Foreign Trade and the Reparation Payments," *Q. J. E.* 36, pp 482-503.
- "The Monetary Doctrines of J. M. Keynes," *Q. J. E.* 45, pp. 547-587.
- WILLIS, H. P. *A History of the Latin Monetary Union*. Chicago, 1901.
- WOLF, JULIUS. *Nationalökonomie als exakte Wissenschaft*. Leipzig, 1908
Valuta und Finanznot in Deutschland. Stuttgart, 1920.
- YOUNG, ALLYN A. "War Debts, External and Internal," *Foreign Affairs*, vol II, no. 3, pp. 397-409.
- ZIMMERMANN, KURT. *Das Krisenproblem in der neuern nationalökonomischen Theorie*. Halberstadt, 1926.

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