SELECTED READINGS

Focus on: Paul Krugman

October 2008

INDEX

INTRODUCTION

Paul Robin Krugman is well-known in academia for his work in international economics, including trade theory, economic geography, and international finance.

He is a professor of economics and international affairs at Princeton University, and a columnist for The New York Times. In 2008, Krugman won the Nobel Memorial Prize in Economic Sciences "for his analysis of trade patterns and location of economic activity".

Paul Robin Krugman is born February 28 1953, grew up on Long Island in New York. He received his B.A. from Yale University in 1974 and his Ph.D. from MIT in 1977.

Mr. Krugman is the author or editor of 20 books and more than 200 papers in professional journals and edited volumes.

His professional reputation rests largely on work in international trade and finance; he is one of the founders of the "new trade theory," a major rethinking of the theory of international trade.

Mr. Krugman's current academic research is focused on economic and currency crises.

At the same time, Mr. Krugman has written extensively for a broader public audience. Some of his recent articles on economic issues, originally published in Foreign Affairs, Harvard Business Review, Scientific American and other journals, are reprinted in Pop Internationalism and The Accidental Theorist.

For the past twenty years, Krugman has written extensively for noneconomists, including a monthly column, "The Dismal Science," for the online magazine *Slate*. He has also been a columnist for *Fortune* and has published articles in *The New Republic*, *Foreign Policy*, *Newsweek*, and the *New York Times Magazine*, before joining the *New York Times*.

Prior to his appointment at Princeton, Krugman served on the faculty of MIT; his last post was Ford International Professor of Economics. He also taught at Yale and Stanford

Universities, and prior to that he was the senior international economist for the President's Council of Economic Advisers under Ronald Reagan.

He is a Fellow of the Econometric Society, a research associate of the National Bureau of Economic Research, and a member of the Group of Thirty. He has served as a consultant to the Federal Reserve Bank of New York, the World Bank, the International Monetary Fund and the United Nations, as well as to a number of countries including Portugal and the Philippines.

In recognition of his work, in 1991 the American Economic Association awarded him its John Bates Clark medal, a prize given every two years to "that economist under forty who is adjudged to have made a significant contribution to economic knowledge."

Krugman has been also awarded by the Nobel Memorial Prize in Economic Sciences for 2008 for his work associated with New Trade Theory.

The following list is a non-exhaustive, subjective selection of Paul Krugman's publications.

This list is divided in four parts:

- Working Papers,
- articles
- chapters
- books

More information can be found on Paul Krugman's homepage at:

http://krugmanonline.com/krugman-bio.htm

Contact point: GianLuigi Mazzi, Responsible for Euro-indicators and statistical methodology, Estat - D1 Key Indicators for European Policies gianluigi.mazzi@ec.europa.eu.

1 WORKING PAPERS

1.1 Richard Baldwin; Paul Krugman, 2001. "Agglomeration, Integration and Tax Harmonization," HEI Working Papers HEIWP01-2001, Economics Section, The Graduate Institute of International Studies.

This paper considers tax competition and tax harmonization in the presence of agglomeration forces and falling trade costs. With agglomerative forces operating, industry is not indifferent to location in equilibrium, so perfectly mobile capital becomes a quasi-fixed factor. This suggests that the tax game is something subtler than a race to the bottom. Advanced 'core' nations may act like limit-pricing monopolists toward less advanced 'periphery' countries. Consequently, integration need not lead to falling tax rates, and might well be consistent with the maintenance of large welfare states. "Limit taxing" also means that that simple tax harmonization - adoption of a common tax rate - always harms at least one nation and adoption of a rate between the two unharmonised rates harms both nations. A tax floor set at the lowest equilibrium tax rate leads to a weak Pareto improvement.

Available at: http://ideas.repec.org/p/gii/giihei/heiwp01-2001.html

1.2 Paul Krugman, 1996. "How the Economy Organizes Itself in Space: A Survey of the New Economic Geography," Working Papers 96-04-021, Santa Fe Institute.

As the example of Silicon Valley makes clear, the economic analysis of location--the geography of the economy--is the subfield of economics to which the typical buzzwords of complexity apply most obviously and dramatically. The spatial economy is, self-evidently, a self-organizing system characterized by path dependence; it is a domain in which the interaction of individual decisions produces unexpected emergent behavior at the aggregate level; its dynamic landscapes are typically rugged, and the evolution of the spatial economy typically involves "punctuated equilibria," in which gradual change in the driving variables leads to occasional discontinuous change in the resulting behavior. And in economic geography, as in many physical sciences, there are puzzling empirical regularities--like the startlingly simple law that describes city sizes--which seem to imply higher level principles at work. There is a long intellectual tradition in economic geography (or rather several separate but convergent traditions). The last few years have, however, seen a considerable acceleration of work, especially in the development of theoretical models of the emergence of spatial structure. This paper is a brief but I hope suggestive survey of this work, intended to convey a flavor of the exciting ideas being developed without going into technical detail. The paper is in five parts. I begin with two very simple motivating models that illustrate why economic geography so naturally leads to the typical "complexity" themes. Each of the next three parts then describes a particular major line of research. A final part discusses implications and directions for future work.

Available at: http://www.santafe.edu/research/publications/workingpapers/96-04-021.pdf

1.3 Paul Krugman, 1996. "Domestic Distortions and the Deindustrialization Hypothesis," NBER Working Papers 5473, National Bureau of Economic Research, Inc

It is widely believed that U.S. trade deficits have displaced workers from highly paid manufacturing jobs into less well-paid service employment, contributing to declining incomes for the nation as a whole. Although proponents of this view do not usually think of it this way, this analysis falls squarely into the `domestic distortions' framework pioneered by Jagdish Bhagwati. This paper models the deindustrialization hypothesis explicitly as a domestic distortions issue, and shows that while it makes conceptual sense it is of limited quantitative importance.

Available at: http://www.nber.org/papers/w5473.pdf

1.4 Paul Krugman & Venables, Anthony J., 1995. "The Seamless World: A Spatial Model of International Specialization," CEPR Discussion Papers 1230, C.E.P.R. Discussion Papers.

This paper is an effort to do international trade theory without mentioning countries. Nearly all models of the international economy assume that trade takes place between nations or regions which are themselves dimensionless points. We develop a model in which economic space is instead assumed to be continuous, and in which this `seamless world' spontaneously organizes itself into industrial and agricultural zones because of the tension between forces of agglomeration and disagglomeration. One might expect such a model to be analytically intractable, but we are able to gain considerable insight through a combination of simulations and an analytical approach originally suggested in a biological context by Alan Turing.

Available at: http://www.cepr.org/pubs/dps/DP1230.asp

1.5 Paul Krugman, 1995. "Technology, Trade, and Factor Prices," NBER Working Papers 5355, National Bureau of Economic Research, Inc.

A number of recent studies appear to show that international trade is a secondary factor in the growing inequality of wages, with technology probably the main culprit. These studies have, however, been subjected to severe and in some cases harshly worded criticism by trade theorists, who argue that the authors of these studies have misspecified the impacts of both technology and trade on factor prices. This paper shows that it is the critics who are confused. In particular, much recent discussion about technology, trade, and wages is marked by a failure to distinguish between the models we all use and the particular thought experiments we typically use to teach these models -- which happen not to be the appropriate thought experiments we need to analyze the real-world issues.

Available at: http://www.nber.org/papers/w5355.pdf

1.6 Paul Krugman, 1994. "Fluctuations, Instability, and Agglomeration," NBER Working Papers 4616, National Bureau of Economic Research, Inc.

Recent models in economic geography suggest that there may be very large numbers of equilibrium spatial structures. Simulations suggest, however, that the structures that emerge are surprisingly orderly, and often seem approximately to follow simple rules about the spacing of urban sites. This paper offers an explanation in terms of the process by which a spatial economy diverges away from an even distribution of activity across the landscape. It shows that a small divergence of activity away from spatial uniformity, even if it is highly irregular, can be regarded as the sum of a number of simple periodic fluctuations at different spatial 'wavelengths'; these fluctuations grow at different rates. There is a particular 'preferred wavelength' that grows fastest; provided that the initial distribution of activity across space is flat enough, this preferred wavelength eventually dominates the spatial pattern and becomes the typical distance between cities. The approach suggests that surprisingly simple principles of self-organization may lie beneath the surface of models that appear at first to yield hopelessly complex possibilities.

Available at: http://www.nber.org/papers/w4616.pdf

1.7 Paul Krugman & Venables, Anthony J., 1994. "Globalization and the Inequality of Nations," CEPR Discussion Papers 1015, C.E.P.R. Discussion Papers.

The paper considers a model in which an imperfectly competitive manufacturing sector produces goods which are used both for final consumption and as intermediates. Intermediate usage creates cost and demand linkages between firms and a tendency for manufacturing agglomeration. How does globalization affect the location of manufacturing and the gains from trade? At high transport costs all countries have some manufacturing industry, but when transport costs fall below a critical value a core-periphery pattern forms spontaneously, and nations that find themselves in the periphery suffer a decline in real income. As transport costs continue to fall there comes a second stage of convergence in real incomes, in which the peripheral nations gain and the core nations may well lose.

Available at: http://www.cepr.org/pubs/dps/DP1015.asp

1.8 Elise S. Brezis & Paul Krugman, 1993. "Immigration, Investment and Real Wages," NBER Working Papers 4563, National Bureau of Economic Research, Inc.

When a country is the recipient of large-scale, politically motivated immigration -- as has been the case for Israel in recent years -- the initial impact is to reduce real wages. Over the longer term, however, the endogenous response of investment, together with increasing returns, may well actually increase real earnings. If immigration itself is not wholly exogenous, but responds to real wages, there may be multiple equilibria. That is, optimism or pessimism about the success of the economy at absorbing immigrants may constitute a self-fulfilling prophecy.

Available at: http://www.nber.org/papers/w4563.pdf

1.9 Paul Krugman, 1993. "Inequality and the Political Economy of Eurosclerosis," CEPR Discussion Papers 867, C.E.P.R. Discussion Papers.

Before the early 1970s generous welfare states seemed to be consistent with high employment. Since then, there has been growing concern over disincentive effects of social insurance. This paper suggests that the problem may have arisen in part because European nations were in effect trying to fight market tendencies towards increased inequality. In the United States, with its much more limited welfare state, there has been a striking rise in inequality; a stylized model suggests that the response of redistributive states to these same market forces could have led to a considerable fall in employment.

Available at: http://www.cepr.org/pubs/dps/DP867.asp

1.10 Paul Krugman & Robert Lawrence, 1993. "Trade, Jobs, and Wages," NBER Working Papers 4478, National Bureau of Economic Research, Inc.

There is a broad consensus among US opinion leaders that our economic problem is largely one of failures of international competition -- that trade deficits have eroded our manufacturing base, that inability to sell on world markets has been a major drag on economic growth, and that imports from low-wage countries have caused a widening of income inequality. This paper summarizes recent evidence on these issues, and shows that while there may be a grain of truth to each complaint, in each case the effect is quantitatively minor. The arithmetic of 'competitiveness' just doesn't work.

Available at: http://www.nber.org/papers/w4478.pdf

1.11 Paul Krugman, 1992. "A Dynamic Spatial Model," NBER Working Papers 4219, National Bureau of Economic Research, Inc

Any interesting model of economic geography must involve a tension between "centripetal" forces that tend to produce agglomerations and "centrifugal" forces that tend to pull them apart. This paper explores one such model, and shows that the model links together a number of themes in the geography literature. These include: the role of market access, as measured by a measure of "market potential", in determining manufacturing location; the role of forward and backward linkages in producing agglomerations; the potential for "catastrophes", i.e., discontinuous changes in location in response to small changes in exogenous variables: and the idea that the economy is a "self-organizing system" that evolves a self-sustaining locational structure.

Available at: http://www.nber.org/papers/w4219.pdf

1.12 Raul Livas Elizondo & Paul Krugman, 1992. "Trade Policy and the Third World Metropolis," NBER Working Papers 4238, National Bureau of Economic Research, Inc.

Many of the world's largest cities are now in developing countries. We develop a simple theoretical model, inspired by the case of Mexico, that explains the existence of such giant cities as a consequence of the strong forward and backward linkages that arise when manufacturing tries to serve a small domestic market. The model implies that these linkages are much weaker when the economy is open to international trade - in other words, the giant Third World metropolis is an unintended by-product of import-substitution policies, and will tend to shrink as developing countries liberalize.

Available at: http://www.nber.org/papers/w4238.pdf

1.13 Paul Krugman, 1991. "Cities in Space: Three Simple Models," NBER Working Papers 3607, National Bureau of Economic Research, Inc.

Urban agglomerations arise at least in part out of the interaction between economies of scale in production and market size effects. This paper develops a simple spatial framework to develop illustrative models of the determinants of urban location, of the number and size of cities, and of the degree of urbanization. A Central theme is the probable existence of multiple equilibria, and the dependence of the range of potential outcomes on a few key parameters.

Available at: http://www.nber.org/papers/w3607.pdf

1.14 Paul Krugman, 1991. "First Nature, Second Nature, and Metropolitan Location," NBER Working Papers 3740, National Bureau of Economic Research, Inc.

This paper develops models of spatial equilibrium in which a central metropolis emerges to supply manufactured goods to an agricultural hinterland. The location of the metropolis is not fully determined by the location of resources: as long as it is not too far from the geographical center of the region, the concentration of economic mass at the metropolis makes it the optimal location for manufacturing firms, and is thus self-justifying. The approach in this paper therefore helps explain the role of historical accident and self-fulfilling expectations in metropolitan location.

Available at: http://www.nber.org/papers/w3740.pdf

1.15 Paul Krugman, 1990. "Increasing Returns and Economic Geography," NBER Working Papers 3275, National Bureau of Economic Research, Inc.

This paper develops a two-region, two-sector general equilibriun model of location. The location of agricultural production is fixed, but ionopolistcally competitive manufacturing firms choose their location to maximize profits. If transportation costs are high, returns to scale weak, and the share of spending on manufactured goods low, the incentive to produce close to the market leads to an equal division of manufacturing between the regions. With lower transport costs, stronger scale economies, or a higher manufacturing share, circular causation sets in: the more manufacturing is located in one region, the larger that region's share of demand, and this provides an incentive to locate still more manufacturing there. Thus when the parameters of the economy lie even slightly on one side of a critical "phase boundary", all manufacturing production ends up concentrated in only one region.

Available at: http://www.nber.org/papers/w3275.pdf

1.16 Paul Krugman & Julio Rotemberg, 1990. "Target Zones with Limited Reserves," NBER Working Papers 3418, National Bureau of Economic Research, Inc.

Like a fixed exchange rate, a target zone system may be subject to speculative attacks when the reserves of the central bank are limited. This paper analyzes such speculative attacks and their implications; it shows that the recently developed "smooth pasting" model of target zones should be viewed as a special case that emerges only when reserves are sufficiently large. The paper then uses the target zone framework to resolve a seeming paradox in predicting speculative attacks on a gold standard, arguing that such a standard may best be viewed as the boundary between one-sided target zones.

Available at: http://www.nber.org/papers/w3418.pdf

1.17 Paul Krugman & Venables, Anthony J., 1990. "Integration and the Competitiveness of Peripheral Industry," CEPR Discussion Papers 363, C.E.P.R. Discussion Papers.

This paper analyses economic integration between two economies; one central, with a large local market, and the other peripheral, with a small local market. Each economy has an imperfectly competitive manufacturing sector. Trade liberalization creates a strong incentive for the imperfectly competitive industry to concentrate in the central region, near the large market. This may cause the direction of net trade to be the opposite of that predicted by factor endowments. This effect may be offset by a lower wage in the periphery than in the centre; we find that in the early stages of integration relative wages in the centre and periphery diverge, with convergence occurring only in the later stages.

Available at: http://www.cepr.org/pubs/dps/DP363.asp

1.18 Paul R. Krugman, 1988. "Market-Based Debt-Reduction Schemes," NBER Working Papers 2587, National Bureau of Economic Research, Inc.

Recently much attention has been given to the idea of reducing the debt of developing countries through a "menu approach" of schemes that attempt to harness the discounts on debt in the secondary market. This paper, after reviewing the rationale for the orthodox strategy of concerted lending and the case for debt forgiveness, examines the logic behind several market-based debt reduction schemes. It shows that such schemes will ordinarily benefit both debtor and creditor only when the debtor is on the wrong side of the "debt relief Laffer curve" -- that is, where a reduction in nominal claims actually increases expected payment. This is, however, also the case in which unilateral debt forgiveness is in the interest of creditors in any case. The implication is that there is no magic in market-based debt reduction, as opposed to more straightforward approaches.

Available at: http://www.nber.org/papers/w2587.pdf

1.19 Paul Krugman, 1989. "History Vs. Expectations," NBER Working Papers 2971, National Bureau of Economic Research, Inc.

In models with external economies, there are often two or more long run equilibria. Which equilibrium is chosen? Much of the literature presumes that "history" sets initial conditions which determine the outcome, but an alternative view stresses the role of "expectations", i.e. of self-fulfilling prophecy. This paper uses a simple trade model with both external economies and adjustment costs to show how the parameters of the economy determine the relative importance of history and expectations in determining equilibrium.

Available at: http://www.nber.org/papers/w2971.pdf

1.20 Paul Krugman & Martin Feldstein, 1989. "International Trade Effects of Value Added Taxation," NBER Working Papers 3163, National Bureau of Economic Research, Inc.

The actual value added tax systems used in many countries differ significantly from the completely general VAT that has been the focus of most economic analyses. In practice, VAT systems exempt broad classes of consumer goods and services. This has important implications for the effect of the VAT on international trade. A value added tax is sometimes advocated as a way of improving a country's international competitiveness because GATT rules permit the tax to be levied on imports and rebated on exports. This leads to political support for the VAT among exporters and producers of import-competing products. For a general VAT on all consumption, this argument is incorrect except in the very short run because exchange rates or domestic prices adjust to offset the effect of the tax on the relative prices of domestic and foreign goods. When prices or exchange rates have adjusted, a general value added tax will have no effect on imports and exports. In practice, the value added tax frequently exempts housing and many personal services. The VAT thus raises the price of tradeables relative to nontradeables and induces a substitution of housing and services for tradeable goods. Since this implies a reduced consumption of imported goods, it also implies a decline in exports. The most likely effect of the introduction of a VAT would thus be a decline of exports.

Available at: http://www.nber.org/papers/w3163.pdf

1.21 Paul R. Krugman, 1989. "Financing vs. Forgiving a Debt Overhang," NBER Working Papers 2486, National Bureau of Economic Research, Inc.

This paper examines the tradeoffs facing creditors of a country whose debt is large enough that the country cannot attract voluntary new lending. If the country is unable to meet its debt service requirements out of current income, the creditors have two choices. They can finance the country, lending at an expected loss in the hope that the country will eventually be able to repay its debt after all; or they can forgive, reducing the debt level to one that the country can repay. The post-1983 debt strategy of the IMF and the US has relied on financing, but many current calls for debt reform call for forgiveness instead. The paper shows that the choice between financing and forgiveness represents a tradeoff. Financing gives the creditors an option value: if the country turns out to do relatively well, creditors will not have written down their claims unnecessarily. However, the burden of debt distorts the country's incentives, since the benefits of good performance go largely to creditors rather than itself. The paper also shows that the tradeoff itself can be improved if both financing and forgiveness are made contingent on states of nature that the country cannot affect, such as oil prices, world interest rates, etc.

Available at: http://www.nber.org/papers/w2486.pdf

1.22 Paul Krugman, 1989. "Is Bilateralism Bad?," NBER Working Papers 2972, National Bureau of Economic Research, Inc.

In the 1980s the process of trade liberalization through multilateral negotiation seems to have run aground. In its place there have been a number of bilateral and regional moves toward liberalization. Some have been concerned that these local deals may, by undermining the multilateral process, actually reduce world trade and welfare. This paper develops a simple model of the effects of regional trading blocs, and shows that consolidation of the world into a smaller number of such blocs may indeed reduce welfare, even when each bloc acts to maximize the welfare of its members. Indeed, for all plausible parameter values world welfare is minimized when there are three trading blocs. More complex versions of the model offer softer results, but the main thrust is still to validate concern over the effects of bilateral and regional trade deals.

Available at: http://www.nber.org/papers/w2972.pdf

1.23 Paul Krugman, 1989. "Differences in Income Elasticities and Trends in Real Exchange Rates," NBER Working Papers 2761, National Bureau of Economic Research, Inc

One might expect that differences in income elasticities in trade and/or differences in growth rates among countries would give rise to strong secular trends in real exchange rates; for example, fast-growing countries might need steady depreciation to get the world to accept their growing exports. In fact, however, income elasticities are systematically related to growth rates by the "45-degree rule", under which fast-growing countries appear to face high income elasticities of demand for their exports, while having low income elasticities of import demand. The net effect of this relationship between elasticities and growth rates is that secular trends in real exchange rates are much smaller than one might otherwise have expected: relative PPP holds fairly well. This paper documents the existence of a "45-degree rule", and suggests an explanation in terms of increasing returns and product differentiation.

Available at: http://www.nber.org/papers/w2761.pdf

1.24 Paul Krugman, 1987. "Adjustment in the World Economy," NBER Working Papers 2424, National Bureau of Economic Research, Inc.

There is a widespread view that world payments imbalances can be remedied through increased demand in surplus countries and reduced demand in deficit countries, without any need for real exchange rate changes. In fact shifts in demand and real exchange rate adjustment are necessary couplets, not substitutes. The essential reason for this complementarity is that a much higher fraction of a marginal dollar of US than of foreign spending falls on US output. As a result, a redistribution of world spending away from the US leads to an excess supply of US goods unless accompanied by a decline in their relative price. Although some economists believe that the integration of world capital markets somehow eliminates this problem, this is a fallacy that confuses accounting identities with behavior. The paper also addresses a number of relates issues, such as the role of budget deficits in determining domestic demand and the effectiveness of nominal exchange rates changes in producing real depreciation.

Available at: http://www.nber.org/papers/w2424.pdf

1.25 Paul R. Krugman, 1988. "Target Zones and Exchange Rate Dynamics," NBER Working Papers 2481, National Bureau of Economic Research, Inc

This paper develops a highly simplified model of exchange rate behavior within the band under a target zone regime. It shows that the expectation that authorities will defend the band exerts a stabilizing effect on exchange rate behavior within the band, even when the authorities are not actively intervening. The extent of stabilization can be related in a straightforward way to three factors: the sensitivity of the current exchange rate to expected depreciation, the volatility of the process driving exchange rate "fundamentals", and the credibility of the commitment by authorities to defend the target zone.

Available at: http://www.nber.org/papers/w2481.pdf

1.26 Paul R. Krugman, 1988. "Deindustrialization, Reindustrialization, and the Real Exchange Rate," NBER Working Papers 2586, National Bureau of Economic Research, Inc.

This paper models an economy in which it is costly to move resources between the tradeable and nontradeable sectors. The economy is subject to capital flows that are unpredictable and are perceived as having only limited persistence. The model shows that both the fact that capital flows are perceived as temporary and uncertainty per se act to limit the responsivesness of resource reallocation to real exchange rate movements. In turn, this reluctance of factors to move widens the range of real exchange rate variation, so that larger movements of the real exchange rate are needed to accommodate transitory, unpredictable capital flows than would be required to accommodate persistent, predictable flows of the same magnitude. The model also shows that large capital inflows that lead to real exchange rate appreciation large enough to induce resource reallocation will typically be followed by a depreciation of the real exchange rate to below its original level.

Available at: http://www.nber.org/papers/w2586.pdf

1.27 Paul Krugman, 1987. "Trigger Strategies and Price Dynamics in Equity and Foreign Exchange Markets," NBER Working Papers 2459, National Bureau of Economic Research, Inc.

Trigger strategist-s may be defined as act-ors in asset markets who buy or sell when the price reaches a predetermined level ; t-hey include participants in portfolio insurance schemes in equity markets and central banks who intervene to defend an exchange rate target zone. This paper presents an approach to modeling the effects of trigger strategists, with emphasis on how target zones affect market expectations. It is shown that a commitment to defend a target zone will generate stabilizing expectations within the band, which may generate a "target zone honeymoon", an extended period in which the announcement of a target zone stabilizes exchange rates without any need for action on the part of authorities. However, an imperfectly credible target zone is vulnerable to crises in which the market tests the authorities' resolve.

Available at: http://www.nber.org/papers/w2459.pdf

1.28 Paul Krugman, 1986. "Pricing to Market when the Exchange Rate Changes," NBER Working Papers 1926, National Bureau of Economic Research, Inc.

It has been widely remarked that US import prices have not fully reflected movements in the exchange rate. This paper begins with an investigation of the actual extent of "pricing to market" by foreign suppliers. It shows that pricing to market is a real phenomenon, but not universal; in particular, evidence on German export prices suggests that stickiness of import prices is largely confined to machinery and transport equipment. The paper then considers a number of possible models. While the evidence is not sufficient to distinguish among these models, it seems probable that a full explanation will involve both dynamics and imperfect competition.

Available at: http://www.nber.org/papers/w1926.pdf

1.29 Paul Krugman, 1986. "Industrial Organization and International Trade," NBER Working Papers 1957, National Bureau of Economic Research, Inc.

This paper reviews recent work on the relationship between industrial organization and international trade. Five strands in the theoretical literature are discussed. First is the role of economies of scale as a cause of intra-industry trade, modelled using monopolistic competition. Second is the effect of tariffs and quotas on domestic market power. Third is the analysis of dumping as international price discrimination. Fourth is the potential strategy role of government policy as an aid to domestic firms in oligopolistic competition. Finally, the paper discusses recent work that may provide a new argument for protectionism. A concluding section discusses recent efforts at quantification of new trade theory.

Available at: http://www.nber.org/papers/w1957.pdf

1.30 Richard E. Baldwin & Paul Krugman, 1986. "Market Access and International Competition: A Simulation Study of 16K Random Access Memories," NBER Working Papers 1936, National Bureau of Economic Research, Inc

This paper develops a model of international competition in an oligopoly characterized by strong learning effects. The model is quantified by calibrating its parameters to reproduce the US-Japanese rivalry in 16K RAMs (Random Access Memory) from 1978-1983. We then ask the following question: how much did the apparent closure of the Japanese market to imports affect Japan's export performance? A simulation analysis suggests that a protected home market was a crucial advantage to Japanese firms, which would otherwise have been uncompetitive both at home and abroad. We find, however, that Japan's home market protection nonetheless produced more costs than benefits for Japan.

Available at: http://www.nber.org/papers/w1936.pdf

1.31 Paul Krugman, 1986. "Is the Japan Problem Over?," NBER Working Papers 1962, National Bureau of Economic Research, Inc.

This paper argues that Japan's export growth is likely to slow sharply over the next few years, perhaps to zero. For the past dozen years Japan's export volume has gown much more rapidly than her domestic production. This divergence was made necessary primarily by rising oil prices, and secondarily by a shift into current account surplus. Now both these factors are running in reverse. If Japan's export growth does slow sharply, the mechanism will be a very strong yen -- probably above 140. The paper argues that it is Japan's export growth rather than static trade structure that is the main cause of trade tension, so these developments should lead to a considerable reduction in trade friction.

Available at: http://www.nber.org/papers/w1962.pdf

1.32 Paul Krugman, 1985. "Is the Strong Dollar Sustainable?," NBER Working Papers 1644, National Bureau of Economic Research, Inc

This paper presents evidence strongly suggesting that the current strength of the dollar reflects myopic behavior by international investors; that is, that part of the dollar's strength can be viewed as a speculative bubble. At some point this bubble will burst, leading to a sharp fall in the dollar's value. The essential argument is that given the modest real interest differentials between the U.S. and its trading partners, the dollar's strength amounts to an implicit forecast on the part of the market that with high probability the dollar will remain very strong for an extended period. The paper shows that such sustained dollar strength would lead the U.S. to Latin American levels of debt relative to GNP, which is presumably not feasible. Allowing for the possibility that something will be done to bring the dollar down before this happens actually reinforces the argument that the current value of the dollar is unreasonable.

Available at: http://www.nber.org/papers/w1644.pdf

1.33 Richard Baldwin & Paul Krugman, 1986. "Persistent Trade Effects of Large Exchange Rate Shocks," NBER Working Papers 2017, National Bureau of Economic Research, Inc.

This paper presents a theoretical basis for the argument that large exchange rate shocks - such as the rise of the dollar from 1980 to 1985 - may shift historical relationships between exchange rates and trade flows. We begin with partial models in which large exchange rate fluctuations lead to entry or exit decisions that are not reversed when the currency returns to its previous level. When we develop a simple model of the feedback from "hysteresis" in trade to the exchange rate itself. Here we see that a large capital inflow, which leads to an initial appreciation, can result in a persistent reduction in the exchange rate consistent with trade balance.

Available at: http://www.nber.org/papers/w2017.pdf

1.34 Paul Krugman, 1985. "Increasing Returns and the Theory of International Trade," NBER Working Papers 1752, National Bureau of Economic Research, Inc.

Increasing returns are as fundamental a cause of international trade as comparative advantage, but their role has until recently been neglected because of the problem of modelling market structure. Recently substantial theoretical progress has been made using three different approaches. These are the Marshallian approach, where economies of scale are assumed external to firms; the Chamberlinian approach, where imperfect competition takes the relatively tractable form of monopolistic competition; and the Cournot approach of noncooperative quantity-setting firms. This paper surveys the basic concepts and results of each approach. It shows that some basic insights are not too sensitive to the particular model of market structure. Although much remains to be done, we have made more progress toward a general analysis of increasing returns and trade than anyone would have thought possible even a few years ago.

Available at: http://www.nber.org/papers/w1752.pdf

1.35 Paul Krugman, 1983. "Oil and the Dollar," NBER Working Papers 0554, National Bureau of Economic Research, Inc

This paper develops a simple theoretical model of the effect of an oil price increase on exchange rates. The model shows that the direction of this effect depends on a comparison of the direct balance of payments burden of the higher oil price with the indirect balance of payments benefits of OPEC spending and investment. In the short run, what matters is whether the U.S. share of world oil imports is more or less than its share of OPEC asset holdings; in the long run, whether its share of oil imports is more or less than its share of OPEC imports. Casual empiricism suggests that the initial effect and the long run effect will run in opposite directions: an oil price increase will initially lead to dollar appreciation, but eventually leads to dollar depreciation.

Available at: http://www.nber.org/papers/w0554.pdf

1.36 Paul Krugman & Torsten Persson & Lars E.O. Svensson, 1982. "Inflation, Monetary Velocity, and Welfare," NBER Working Papers 0987, National Bureau of Economic Research, Inc

This paper develops a simple general equilibrium model of a monetary economy with a capital market, in which monetary demand arises from a "cash-in-advance" constraint rather than from any direct role in the utility function. Uncertainty gives rise to a meaningful portfolio choice between money and bonds. We show that monetary velocity is increasing in the rate of inflation, and that the optimal monetary policy is that which maximizes real balances. We also show that the real rate of interest is not invariant to monetary policy: inflation lowers the real rate.

Available at: http://www.nber.org/papers/w0987.pdf

1.37 Paul Krugman, 1979. "International Trade and Income Distribution: A Reconsideration," NBER Working Papers 0356, National Bureau of Economic Research, Inc.

The postwar expansion of trade among the industrial countries has not had the strong distributional effects which standard models of trade would have led us to expect. This paper develops a model which attempts to explain this observation, while at the same time making sense of some other puzzling empirical aspects of world trade. The basis of the model is a distinction between two kinds of trade: "Heckscher-Ohlin" trade, based on differences in factor proportions, and "intraindustry" trade, based on scale economies and product differentiation. To incorporate intraindustry trade into the model it is necessary to drop the usual assumptions of constant returns to scale and perfect competition; instead the paper deals with a world where economies of scale are pervasive and all firms possess some monopoly power. Surprisingly, it is nonetheless possible to develop a fully-worked-out general equilibrium model which remains simple and can be used to compare autarky and free trade. Two main results emerge from the analysis. First, the nature of trade depends on how similar countries are in their factor endowments. As countries become more similar, the trade between them will increasingly become intra-industry in character. Second, the effects of opening trade depend on its type. If intraindustry trade is sufficiently dominant the advantages of extending the market will outweigh the distributional effects, and the owners of scarce as well as of abundant factors will be made better off.

Available at: http://www.nber.org/papers/w0356.pdf

1.38 Paul Krugman, 1981. "Real Exchange Rate Adjustment and the Welfare Effects of Oil Price Decontrol," NBER Working Papers 0658, National Bureau of Economic Research, Inc.

Conventional analysis of the welfare effects of U.S. oil price regulation in the 1970's focuses on the deadweight losses in the oil market. This paper argues that such analysis substantially understates the benefits from decontrolling prices, because decontrol will lead to an improvement in the U.S. terms of trade with respect to other oil importing countries. A simple model of the relationship between oil decontrol and the terms of trade is developed, and the impact is calculated for plausible parameter values. The results suggest that the terms of trade benefits are several times larger than the benefits as conventionally measured.

Available at: http://www.nber.org/papers/w0658.pdf

1.39 Paul Krugman, 1981. "Consumption Preferences, Asset Demands, and Distribution Effects in International Financial Markets," NBER Working Papers 0651, National Bureau of Economic Research, Inc.

This paper is an attempt to examine some of the microeconomic foundations of this last view of the link between current accounts and exchange rata. Several authors, especially Kouri and de Macedo (1978), but also more recently Dornbusch (1980), have sought to justify the portfolio approach in terms of finance theory, deriving asset demands from a mean-variance framework and arguing that differences in the portfolios of different countries explain why changes in the world distribution of wealth affect exchange rates. What I will do in this paper is to argue that, even under seemingly favorable assumptions, these distribution effects nay run the wrong way; that if they run the right way, they will be very weak; and that the incentives for inter-national, portfolio diversification are in any case small, and can be swamped by quite modest transaction costs or other costs to diversification.

Available at: http://www.nber.org/papers/w0651.pdf

1.40 Paul Krugman, 1979. "Vehicle Currencies and the Structure of International Exchange," NBER Working Papers 0333, National Bureau of Economic Research, Inc

This paper is concerned with the reasons why some currencies, such as the pound sterling and the U.S. dollar, have come to serve as "vehicles" for exchanges of other currencies. It develops a three¬country model of payments equilibrium with transaction costs, and shows how one currency can emerge as an international medium of exchange. Transaction costs are then made endogenous, and it is shown how the underlying structure of payments limits, without necessarily completely determining, the choice and role of a vehicle currency. Finally, a dynamic model is developed, and the way in which one currency can displace another as the international medium of exchange is explored.

Available at: http://www.nber.org/papers/w0333.pdf.

2 ARTICLES

2.1 Paul Krugman, 2008. "Response to Nelson and Schwartz," Journal of Monetary Economics, Elsevier, vol. 55(4), pages 857-860, May.

The impact of Milton Friedman on modern monetary economics: setting the record straight on Paul Krugman's "Who was Milton Friedman?" and the critique of Nelson and Schwartz, Krugman focuses on three central economic topics: (i) whether it is reasonable to claim that the Federal Reserve caused the Great Depression; (ii) whether monetary policy had the power to engineer an economic recovery after the onset of the depression; and (iii) whether monetarism succeeded or failed. On all these key points, he rejects the criticisms of Nelson and Schwartz.

Available at:
http://www.sciencedirect.com/science/article/B6VBW-4SK631F-1/1/e01921fbf80528ea4e304176685e555c

2.2 Paul Krugman, 2007. "Will there be a dollar crisis?," Economic Policy, CEPR, CES, MSH, vol. 22, pages 435-467, 07.

"Almost everyone believes that the US current account deficit must eventually end, and that this end will involve dollar depreciation. However, many believe that this depreciation will take place gradually. This paper shows that any process of gradual dollar decline fast enough to prevent the accumulation of implausible levels of US external debt would impose capital losses on investors much larger than they currently expect. As a result, there will at some point have to be a 'Wile E. Coyote moment'- a point at which expectations are revised, and the dollar drops sharply. It is much less clear, however, whether this 'crisis' will produce macroeconomic problems."

Available at:
http://www.blackwell-synergy.com/doi/abs/10.1111/j.1468-0327.2007.00183.x

2.3 Dean Baker & J. Bradford Delong & Paul Krugman, 2005. "Asset Returns and Economic Growth," Brookings Papers on Economic Activity, Economic Studies Program, The Brookings Institution, vol. 36(2005-1), pages 289-330.

America is probably facing a slowdown in the rate of natural population increase and possibly a slowdown in productivity growth. We argue that, if these two factors depress the rate of future economic growth, one cannot assume that the past performance of asset returns is indicative of future results. Simple standard closed-economy growth models predict that a growth slowdown will likely lower the marginal product of capital and thus the long-run rate of return. Moreover, if current asset valuations represent rational expectations, simple arithmetic shows that it is almost impossible for past rates of return to continue through a growth slowdown. In standard models at least, only a large shift in the income distribution toward capital, or future current account surpluses that are larger and more persistent than those that nineteenth-century Britain sustained for generations, give promise for reconciling a future slowdown with a continuation of historical asset returns.

Available at:
http://www.brookings.edu/press/Journals/2005/brookingspapersoneconomicactivity12005.aspx

2.4 Paul Krugman, 2004. "Confusions about Social Security," The Economists' Voice, Berkeley Electronic Press, vol. 2(1), pages 1

There is a lot of confusion in the debate over Social Security privatization, much of it deliberate. This essay discusses the meaning of the trust fund, which privatizers declare either real or fictional at their convenience; the likely rate of return on private accounts, which has been greatly overstated; and the (ir)relevance of putative reductions in far future liabilities.

Available at: http://www.bepress.com/cgi/viewcontent.cgi?article=1048&context=ev

2.5 Masahisa Fujita & Paul Krugman, 2004. "The new economic geography: Past, present and the future," Economics of Governance, Springer, vol. 83(1), pages 139-164, October.

This article presents a summary of our conversation on the past, present and future of the new economic geography, which took place with the help of an interlocutor in San Juan, Puerto Rico in November 2002. Following the introduction, we explain what the new economic geography is, and we describe some basic models. The discussion of its various critical aspects is presented subsequently, and the article concludes with the discussion of future issues and challenges facing the field.

Available at: http://hdl.handle.net/10.1007/s10110-003-0180-0

2.6 Paul Krugman, 2002. "Echaremos de menos a Tobin," Revista de Economía Institucional, Universidad Externado de Colombia - Facultad de Economía, vol. 4(6), pages 197-199, January-J.

No abstract available.

Available at:
http://www.uexternado.edu.co/facecono/ecoinstitucional/workingpapers/pkrugman6.pdf

2.7 Paul Krugman, 2000. "Thinking about the Liquidity Trap, "Journal of the Japanese and International Economies, Elsevier, vol. 14(4), pages 221-237, December.

The purpose of this paper is twofold. First, it is a restatement of what I believe to be the essential logic of liquidity-trap economics, with an emphasis in particular on how the "modern" macro I initially used to approach the problem links up with more traditional (and still very useful) IS-LM-type thinking. Second, it attempts to examine in a more or less coherent way the various alternative policies that either are in place or have been proposed to deal with Japan's liquidity trap, ranging from fiscal stimulus to unconventional open-market operations (and it tries in particular to make clear the difference between the latter and the expectations-focused inflation targeting I have proposed).

Available at: http://www.sciencedirect.com/science/article/B6WMC-45F4YB2-2/2/ee9573d9e367232059e75e116df3bedd

2.8 Paul Krugman, 2000. "Can America Stay on Top?," Journal of Economic Perspectives, American Economic Association, vol. 14(1), pages 169-175, Winter.

No abstract available.
Available at: http://www.humboldt.edu/~ee3/econ323/topics/krugman.pdf

2.9 Paul Krugman, 2000. "Crises: the price of globalization?," Proceedings, Federal Reserve Bank of Kansas City, pages 75-106.

No abstract available.
Available at: http://www.kc.frb.org/PUBLICAT/SYMPOS/2000/S00krug.pdf

2.10 Paul Krugman, 2000. "How Complicated Does the Model Have to Be?," Oxford Review of Economic Policy, Oxford University Press, vol. 16(4), pages 33-42, Winter.

Simple macroeconomic models based on IS-LM have become unfashionable because of their lack of micro-foundations, and are in danger of being effectively forgotten by the profession. Yet while thinking about micro-foundations is a productive enterprise, complex models based on such foundations are not necessarily more accurate than simple, ad-hoc models. Three decades of attempts to base aggregate supply on rational behaviour have not displaced the Phillips curve; inter-temporal models of consumption do not offer reliable predictions about aggregate demand. Meanwhile, the ease of use of small models makes them superior for many practical applications. So we should not allow them to be driven out of circulation.

Available at:
http://www.ingentaconnect.com/content/oup/ecopol/2000/00000016/00000004/art00033

2.11 Paul Krugman, 2000. "Technology, trade and factor prices," Journal of International Economics, Elsevier, vol. 50(1), pages 51-71, February.

The view that recent changes in the distribution of income primarily reflect technology rather than trade may be the majority opinion, but has been harshly criticized by some trade economists. This paper will argue that the critique in fact misses the point, essentially because the critics undertake the wrong thought experiments. Trade volumes are not irrelevant: if one poses the question correctly, one immediately realizes that small trade volumes are inconsistent with a story that attributes large distributional effects to trade. The factor bias of technological change is not immaterial, except in the case where such change takes place in a small open economy (as opposed to one that can affect world prices), and where technical change occurs only in that economy (rather than occurring simultaneously in other economies as well); since the real situation does not meet either criterion, factor bias definitely does matter. Most surprisingly, the much maligned use of a factor content approach to infer the effects of trade on factor prices turns out to be an entirely justified procedure when carefully applied.

Available at: http://www.sciencedirect.com/science/article/B6V6D-3Y6Y4R3-3/2/7f791f8bd9baf7599e72ee790b1ed6b6

2.12 Fujita, Masahisa & Paul Krugman & Mori, Tomoya, 1999. "On the evolution of hierarchical urban systems," European Economic Review, Elsevier, vol. 43(2), pages 209-251, February

The rapid urbanization trend of the world economy implies an increasing importance of cities as basic units of national and international trade. Given that the cities within an economy constitute some form of hierarchical structure, we model the endogenous formation of a hierarchical urban system. To overcome the multiplicity of equilibria, we propose an evolutionary approach which combines a general equilibrium model with an adjustment dynamics. It is demonstrated that as the economy's population size increases gradually, the urban system self-organizes into a highly regular hierarchical system a la Christaller.

Available at: http://www.sciencedirect.com/science/article/B6V64-3VF9GKY-1/2/bad51c2d8874bf54aa651f2a63711193a

2.13 Paul Krugman, 1999. "Balance Sheets, the Transfer Problem, and Financial Crises," International Tax and Public Finance, Springer, vol. 6(4), pages 459-472, November.

In a world of high capital mobility, the threat of speculative attack becomes a central issue of macroeconomic policy. While "first-generation" and "second-generation" models of speculative attacks both have considerable relevance to particular financial crises of the 1990s, a “third-generation” model is needed to make sense of the number and nature of the emerging market crises of 1997-98. Most of the recent attempts to produce such a model have argued that the core of the problem lies in the banking system. This paper sketches another candidate for third-generation crisis modeling—one that emphasizes two facts that have been omitted from formal models to date: the role of companies' balance sheets in determining their ability to invest, and that of capital flows in affecting the real exchange rate.

Available at: http://hdl.handle.net/10.1023/A:1008741113074

2.14 Paul Krugman, 1998. "It's Baaack: Japan's Slump and the Return of the Liquidity Trap," Brookings Papers on Economic Activity, Economic Studies Program, The Brookings Institution, vol. 29(1998-2), pages 137-206.

In the early years of macroeconomics as a discipline, the liquidity trap- that awkward condition in which monetary policy loses its grip because the nominal interest rate is essentially zero, in which the quantity of money becomes irrelevant because money and bonds are essentially perfect substitutes- played a central role. Hicks (1937), in introducing both the IS-LM model and the liquidity trap, identified the assumption that monetary policy was ineffective, rather than the assumed downward inflexibility of prices, as the central difference between “Mr. Keynes and the classics”. It has often been pointed out that the Alice-in-Wonderland character of early Keynesianism, with its paradoxes of thrift, widow's cruses, and so on, depended on the explicit or implicit assumption of an accommodative monetary policy; it has less often been pointed out that in the late 1930s and early 1940s it seemed quite natural to assume that money was irrelevant at the margin. After all, at the end of the 30s interest rates were hard up against the zero constraint: the average rate on Treasury bills during 1940 was 0.014 percent. Since then, however, the liquidity trap has steadily receded both as a memory and as a subject of economic research. Partly this is because in the generally inflationary decades after World War II nominal interest rates stayed comfortably above zero, and central banks therefore no longer found themselves “pushing on a string”.

Available at: http://www.brookings.edu/press/Journals/1998/bpea198.aspx

2.15 Paul Krugman, 1998. "Space: The Final Frontier," Journal of Economic Perspectives, American Economic Association, vol. 12(2), pages 161-74.

No abstract available.
Available at: http://www.jstor.org/pss/2646968

2.16 Paul Krugman, 1998. "Two Cheers for Formalism," Economic Journal, Royal Economic Society, vol. 108(451), pages 1829-36, November.

No abstract available.
Available at:
http://www.blackwell-synergy.com/servlet/useragent?func=synergy&synergyAction=showTOC&journalCode=ecoj&volume=108&issue=451&year=∂=null

2.17 Paul Krugman, 1998. "What's New about the New Economic Geography?," Oxford Review of Economic Policy, Oxford University Press, vol. 14(2), pages 7-17.

Since 1990 a new genre of research, often described as the 'new economic geography,' has emerged. It differs from traditional work in economic geography mainly in adopting a modelling strategy that exploits the same technical tricks that have played such a large role in the 'new trade' and 'new growth' theories; these modelling tricks, while they preclude any claims of generality, do allow the construction of models that--unlike most traditional spatial analysis--are fully general-equilibrium and clearly derive aggregate behaviour from individual maximization. The new work is highly suggestive, particularly in indicating how historical accident can shape economic geography, and how gradual changes in underlying parameters can produce discontinuous change in spatial structure. It also serves the important purpose of placing geographical analysis squarely in the economic mainstream.

Available at:
http://www.ingentaconnect.com/content/oup/ecopol/1998/00000014/00000002/art00007

2.18 Brezis, Elise S & Paul Krugman, 1997. "Technology and the Life Cycle of Cities," Journal of Economic Growth, Springer, vol. 2(4), pages 369-83, December.

During times of major technological change, leading cities are often overtaken by upstart metropolitan areas. Such upheavals may be explained if the advantage of established urban centers rests on localized learning by doing. When a new technology is introduced, for which this accumulated experience is irrelevant, older centers prefer to stay with a technology in which they are more efficient. New centers, however, turn to the new technology and are competitive despite the raw state of that technology because of their lower land rents and wages. Over time, as the new technology matures, the established cities are overtaken.

Available at: http://journals.kluweronline.com/issn/1381-4338/contents

2.19 Paul Krugman, 1997. "Why Should Trade Negotiators Negotiate About?," Journal of Economic Literature, American Economic Association, vol. 35(1), pages 113-120, March.

In recent years there have been growing demands to make trade liberalization contingent on adoption of common labor and environmental standards. The straightforward economic answer is that this makes little sense: neither the gains from trade nor the gains from appropriate regulation are compromised if other countries impose standards that are weaker than your own. It is possible to offer second-bet economic rationales for harmonization, but these are empirically unconvincing. The only serious argument in favor or regulation is political: that regulation which is in the national interest may not be politically feasible unless other countries do the same.

Available at: http://www.e-jel.org/archive/mar1997/Krugman.pdf

2.20 Paul Krugman & Elizondo, Raul Livas, 1996. "Trade policy and the Third World metropolis," Journal of Development Economics, Elsevier, vol. 49(1), pages 137-150, April.

Many of the world's largest cities are now in developing countries. We develop a simple theoretical model, inspired by the case of Mexico, that explains the existence of such giant cities as a consequence of the strong forward and backward linkages that arise when manufacturing tries to serve a small domestic market. The model implies that these linkages are much weaker when the economy is open to international trade -- in other words, the giant Third World metropolis is an unintended by-product of import-substitution policies, and will tend to shrink as developing countries liberalize.

Available at: http://www.sciencedirect.com/science/article/B6VBV-3VW1T1S-K/2/d16c3a65986b083ed83a772404b6565c

2.21 Paul Krugman, 1996. "Making Sense of the Competitiveness Debate," Oxford Review of Economic Policy, Oxford University Press, vol. 12(3), pages 17-25, Autumn.

The debate over national competitiveness is marked by some basic misperceptions. With few exceptions, those who use the term have a crude, essentially mercantilist view of world trade, in which competition among nations is just like competition between corporations. Not only do the authors and readers of reports on national competitiveness usually not understand comparative advantage, they are unaware of the most basic adding-up constraints. Economists, however, find it hard to believe that seemingly well-informed people can really be this naive, and assume that there must be more sophisticated ideas lying behind what they say. The rationales offered by economists, in turn, offer false comfort to the would-be sophisticates who like the term "competitiveness"; they believe that they have transcended conventional economic theory, when the fact is that they have failed to comprehend it. In short, the actual level of discussion is lower than any of the participants imagines.

Available at: http://oxrep.oxfordjournals.org/cgi/reprint/12/3/17

2.22 Paul Krugman & Venables, Anthony J., 1996. "Integration, specialization, and adjustment," European Economic Review, Elsevier, vol. 40(3-5), pages 959-967, April.

The paper considers the equilibrium location of two industries in two countries. Both industries are imperfectly competitive and produce goods which are used in final consumption and as intermediates by firms in the same industry. Intermediate usage creates cost and demand linkages between firms and a tendency for agglomeration of each industry. When trade barriers are high the equilibrium involves division of both industries between both locations in order to meet the final demands of consumers. At lower trade barriers agglomeration forces dominate and the equilibrium involves specialization, with each industry concentrated in a single location. Economic integration may induce specialization. The paper studies the simple dynamics of the model and demonstrates that during the adjustment process a sizeable proportion of the labour force may suffer lower real wages as relocation of industry occurs, although there are long-run gains from integration.

Available at: http://www.sciencedirect.com/science/article/B6V64-3VW8NC3-1S/2/fa8bf3505145848c4ce16b3f94fe8bb4

2.23 Paul Krugman, 1996. "Confronting the Mystery of Urban Hierarchy," Journal of the Japanese and International Economies, Elsevier, vol. 10(4), pages 399-418, December.

The size distribution of cities in the United States is startlingly well described by a simpler power law: the number of cities whose population exceeds S is proportional to 1/ S . This simple regularity is puzzling; even more puzzling is the fact that it has apparently remained true for at least the past century. Standard models of urban systems offer no explanation of the power law. A random growth model proposed by Herbert Simon 40 years ago is the best try to date-but while it can explain a power law, it cannot reproduce one with the right exponent. At this point we are in the frustrating position of having a striking empirical regularity with no good theory to account for it.

Available at: http://www.sciencedirect.com/science/article/B6WMC-45MFXVY-4/2/a9398b14940dad353062a719e2ecf3bb

2.24 Fujita, Masahisa & Paul Krugman, 1995. "When is the economy monocentric?: von Thunen and Chamberlin unified," Regional Science and Urban Economics, Elsevier, vol. 25(4), pages 505-528, August.

Since The Isolated State by von Thünen, countless versions of the von Thünen model have appeared. It seems, however, that a fundamental question remains unanswered: Why should all manufacturing goods be produced in a single town? In this paper we develop a monopolistic competition model of an 'isolated state', and investigate the answer to this question. Since the answer to this question suggests when there will be more than one town in the isolated state, it is hoped the present model will lead to the development of a general equilibrium model of urban systems.

Available at: http://www.sciencedirect.com/science/article/B6V89-3YF4BMT-M/2/0f97b425b59c32e8882ac79a3a610212

2.25 Paul Krugman, 1995. "America in the world economy: Understanding the misunderstandings," Japan and the World Economy, Elsevier, vol. 7(2), pages 233-247, July.

One of the reasons why economists have difficulty in communicating with the general public is that economists are always talking about limits, about why clever schemes will not work. Furthermore, successful business executives have difficulty in recognizing that they do not know all about the economy. A number of illustrations are given of fallacious thinking, and a plea is made to counteract the tendency to make such judgments.

Available at: http://www.sciencedirect.com/science/article/B6VF1-40079C7-X/2/ca8535e836215b7b824ee2d0a3ae0b24

2.26 Paul Krugman, 1995. "Innovation and agglomeration: Two parables suggested by city-size distributions," Japan and the World Economy, Elsevier, vol. 7(4), pages 371-390, November.

No abstract available.
Available at: http://www.sciencedirect.com/science/article/B6VF1-40079B8-1/2/fedaabc0b82c0cf5be433f9fd5a2d5e4

2.27 Paul Krugman, 1995. "Growing World Trade: Causes and Consequences," Brookings Papers on Economic Activity, Economic Studies Program, The Brookings Institution, vol. 26(1995-1), pages 327-377.

No abstract available.
Available at: http://www.brookings.edu/press/Journals/1995/bpeamacro951.aspx

2.28 Paul Krugman, 1994. "Complex Landscapes in Economic Geography," American Economic Review, American Economic Association, vol. 84(2), pages 412-16, May.

No abstract available.
Available at: http://www.jstor.org/pss/2117869

2.29 Paul Krugman & Miller, Marcus, 1993. "Why have a target zone?," Carnegie-Rochester Conference Series on Public Policy, Elsevier, vol. 38(1), pages 279-314, June.

The desire to avoid speculative runs on currencies appears to be one of the main reasons leading policy-makers to impose currency bands, but the standard analysis of target zones rules out any speculative inefficiencies by assumption. As an alternative we first present simple models of excess volatility due to stop-loss trading and then go on to consider what target zones might accomplish in this context. The principal result is that the speculation of informed traders shifts from being destabilizing to stabilizing, once the target zone assures them that stop-loss orders will not be triggered.

Available at: http://www.sciencedirect.com/science/article/B6V8D-45R2J1F-F/2/ed6942f8f9f79958f018691dccc0a3c1

2.30 Paul Krugman, 1993. "On the number and location of cities," European Economic Review, Elsevier, vol. 37(2-3), pages 293-298, April.

No abstract available.
Available at: http://www.sciencedirect.com/science/article/B6V64-45BC5JH-16/2/2acccfb0fa0998129c1834e5df45b69a

2.31 Paul Krugman, 1993. "The Narrow and Broad Arguments for Free Trade," American Economic Review, American Economic Association, vol. 83(2), pages 362-66, May.

No abstract available.
Available at: http://math.stanford.edu/~lekheng/krugman/trade3.pdf

2.32 Paul Krugman, 1993. "What Do Undergrads Need to Know about Trade?," American Economic Review, American Economic Association, vol. 83(2), pages 23-26, May.

No abstract available.
Available at: http://www.jstor.org/pss/2117633

2.33 Paul Krugman, 1992. "Second thoughts on EMU," Japan and the World Economy, Elsevier, vol. 4(3), pages 187-200, November.

Conventional wisdom holds that EMU is economically beneficial and that it must be achieved by a gradual transition. This paper challenges both these assumptions. The benefits are supposed to arise from a tradeoff of macro economic flexibility for microeconomic efficiency, but both these concepts are very hard to quantify, Further, if it is beneficial to form EMU, nothing is gained by delaying it.

Available at: http://www.sciencedirect.com/science/article/B6VF1-458XNYT-12/2/665c5b8935c08ca1a7f2245a03e5d06b

2.34 Paul Krugman, 1991. "Increasing Returns and Economic Geography," Journal of Political Economy, University of Chicago Press, vol. 99(3), pages 483-99, June.

This paper develops a simple model that shows how a country can endogenously become differentiated into an industrialized "core" and an agricultural "periphery." In order to realize scale economies while minimizing transport costs, manufacturing firms tend to locate in the region with larger demand, but the location of demand itself depends on the distribution of manufacturing. Emergence of a core-periphery pattern depends on transportations costs, economies of scale, and the share of manufacturing in national income.

Available at: http://www.jstor.org/pss/2937739

2.35 Paul Krugman, 1991. "History versus Expectations," The Quarterly Journal of Economics, MIT Press, vol. 106(2), pages 651-67, May.

In models with external economies, there are often two or more long-run equilibria. Which equilibrium is chosen? Much of the literature presumes that "history" sets initial conditions that determine the outcome, but an alternative view stresses the role of "'expectations," i.e., of self-fulfilling prophecy. This paper uses a simple trade model with both external economies and adjustment costs to show how the parameters of the economy determine the relative importance of history and expectations in determining equilibrium.

Available at: http://www.jstor.org/pss/2937950

2.36 Paul Krugman, 1991. "Exchange rates and policy coordination: Peter B. Kenen, (Manchester University Press, 1989) pp. 135, Journal of International Economics, Elsevier, vol. 30(1-2), pages 195-197, February.

No abstract available.
Available at: http://www.sciencedirect.com/science/article/B6V6D-45CX0TH-K/2/f67f0937f18d66e5341a5f5f4448ec9f

2.37 Paul Krugman, 1991. "History and Industry Location: The Case of the Manufacturing Belt," American Economic Review, American Economic Association, vol. 81(2), pages 80-83, May.

No abstract available.
Available at: http://www.jstor.org/pss/2006830

2.38 Paul Krugman, 1991. "Target Zones and Exchange Rate Dynamics," The Quarterly Journal of Economics, MIT Press, vol. 106(3), pages 669-82, August.

This paper develops a simple model of exchange rate behavior under a target zone regime. It shows that the expectation that monetary policy will be adjusted to limit exchange rate variation affects exchange rate behavior even when the exchange rate lies inside the zone and is, thus, not being defended actively. Somewhat surprisingly, the analysis of target zones turns out to have a strong formal similarity to problems in option pricing and investment under uncertainty.

Available at: http://links.jstor.org/sici?sici=0033-5533%28199108%29106%3A3%3C669%3ATZAERD%3E2.0.CO%3B2-E&origin=repec

2.39 Paul Krugman, 1991. "The move toward free trade zones," Economic Review, Federal Reserve Bank of Kansas City, issue Nov, pages 5-25.

No abstract available.
Available at:
http://www.kansascityfed.org/PUBLICAT/ECONREV/EconRevArchive/1991/4q91krug.pdf

2.40 Paul Krugman, 1990. "Multinational enterprise: The old and the new in history and theory," North American Review of Economics and Finance, Elsevier, vol. 1(2), pages 267-280.

No abstract available.

Available at: http://www.sciencedirect.com/science/article/B73FK-46TBC9Y-8/2/e77ce72ffac8dce2846b2da595cc296d

2.41 Paul Krugman, 1990. "'Factor market barriers are trade barriers' by R. Baldwin," European Economic Review, Elsevier, vol. 34(4), pages 846-847, June.

No abstract available.
Available at: http://www.sciencedirect.com/science/article/B6V64-45CX0BS-7M/2/04ebdf8c1da38852e17007710182db89

2.42 Paul Krugman, 1989. "Comments 'on the international capital ownership pattern at the turn of the twenty-first century' by Koichi Hamada and Kazumasa Iwata," European Economic Review, Elsevier, vol. 33(5), pages 1083-1085, May.

No abstract available.
Available at: http://www.sciencedirect.com/science/article/B6V64-45DHYR4-1C/2/6c186c3fc7e2293cbeeca00efae29306

2.43 Paul Krugman, 1989. "The J-Curve, the Fire Sale, and the Hard Landing," American Economic Review, American Economic Association, vol. 79(2), pages 31-35, May.

No abstract available.
Available at: http://www2.ups.edu/faculty/veseth/econ371/firesale.pdf

2.44 Paul Krugman, 1989. "Differences in income elasticities and trends in real exchange rates," European Economic Review, Elsevier, vol. 33(5), pages 1031-1046, May.

One might expect that differences in income elasticities in trade and/or differences in growth rates among countries would give rise to strong secular trends in real exchange rates; for example, fast-growing countries might need steady depreciation to get the world to accept their growing exports. In fact, however, income elasticities are systematically related to growth rates by the "45-degree rule", under which fast-growing countries appear to face high income elasticities of demand for their exports, while having low income elasticities of import demand. The net effect of this relationship between elasticities and growth rates is that secular trends in real exchange rates are much smaller than one might otherwise have expected: relative

PPP holds fairly well. This paper documents the existence of a "45-degree rule", and suggests an explanation in terms of increasing returns and product differentiation.

Available at: http://www.sciencedirect.com/science/article/B6V64-45DHYR4-16/2/efd9508ecb7f8639df397bb4653af5e9

2.45 Baldwin, Richard & Paul Krugman, 1989. "Persistent Trade Effects of Large Exchange Rate Shocks," The Quarterly Journal of Economics, MIT Press, vol. 104(4), pages 635-54, November.

This paper presents a theoretical basis for the argument that large exchange rate shocks--such as the 1980s dollar cycle--may have persistent effects on trade flows and the equilibrium exchange rate itself. The authors begin with a partial-equilibrium model in which large exchange rate fluctuations lead to entry or exit decisions that are not reversed when the currency returns to its previous level. They then develop a simple model of the feedback from hysteresis in trade to the exchange rate itself. Here they see that a large capital inflow, which leads to an initial appreciation, can result in a persistent reduction in the exchange rate consistent with trade balance.

Available at: http://links.jstor.org/sici?sici=0033-5533%28198911%29104%3A4%3C635%3APTEOLE%3E2.0.CO%3B2-I&origin=repec

2.46 Paul Krugman, 1988. "Financing vs. forgiving a debt overhang," Journal of Development Economics, Elsevier, vol. 29(3), pages 253-268, November.

This paper examines the tradeoffs facing creditors of a country whose debt is large enough that the country cannot attract voluntary new lending. If the country is unable to meet its debt service requirements out of current income, the creditors have two choices. They can finance the country, lending at an expected loss in the hope that the country will eventually be able to repay its debt after all; or they can forgive, reducing the debt level to one that the country can repay. The post-1983 debt strategy of the IMF and the US has relied on financing, but many current calls for debt reform call for forgiveness instead. The paper shows that the choice between financing and forgiveness represents a tradeoff. Financing gives the creditors an option value: if the country turns out to do relatively well, creditors will not have written down their claims unnecessarily. However, the burden of debt distorts the country's incentives, since the benefits of good performance go largely to creditors rather than itself. The paper also shows that the tradeoff itself can be improved if both financing and forgiveness are made contingent on states of nature that the country cannot affect, such as oil prices, world interest rates, etc.

Available at: http://www.sciencedirect.com/science/article/B6VBV-45MFRNW-2G/2/51d0f7c7a53d4f90dd0bbe0c0a510dee

2.47 Paul Krugman, 1988. "Exchange rates and international adjustment," Japan and the World Economy, Elsevier, vol. 1(1), pages 63-87, October.

No abstract available.
Available at: http://www.sciencedirect.com/science/article/B6VF1-458XNRP-6/2/d6c36964fe253021d8e9375908636341

2.48 Paul Krugman, 1987. "Is Free Trade Passé?," Journal of Economic Perspectives, American Economic Association, vol. 1(2), pages 131-44, Fall.

No abstract available.
Available at: http://www.jstor.org/pss/1942985

2.49 Paul Krugman, 1987. "The narrow moving band, the Dutch disease, and the competitive consequences of Mrs. Thatcher: Notes on trade in the presence of dynamic scale economies," Journal of Development Economics, Elsevier, vol. 27(1-2), pages 41-55, October.

No abstract available.
Available at: http://www.sciencedirect.com/science/article/B6VBV-45NHVN3-5/2/024ea7a28f98e6f1a0f733974eaf3cd1

2.50 Paul Krugman & Richard E. Baldwin, 1987. "The Persistence of the U.S. Trade Deficit," Brookings Papers on Economic Activity, Economic Studies Program, The Brookings Institution, vol. 18(1987-1), pages 1-56.

No abstract available.
Available at:
http://www.brookings.edu/press/Journals/2007/brookingspapersoneconomicactivity12007.aspx

2.51 Paul Krugman, 1986. "International debt: Systemic risk and policy response: William R. Cline, (Institute for International Economics, Washington, 1984) pp. xix+317," Journal of International Economics, Elsevier, vol. 20(3-4), pages 389-391, May.

No abstract available.
Available at: http://www.sciencedirect.com/science/article/B6V6D-4CB7764-1K/2/132c75ba349e6ee07ff79a18b05fa7c1

2.52 Paul Krugman & Torsten Persson & Lars E. O. Svensson, 1985. "Inflation, Interest Rates, and Welfare," The Quarterly Journal of Economics, MIT Press, vol. 100(3), pages 677-95, August.

No abstract available.
Available at: http://links.jstor.org/sici?sici=0033-5533%28198508%29100%3A3%3C677%3AIIRAW%3E2.0.CO%3B2-V&origin=repec

2.53 Paul Krugman, 1984. "The U.S. Response to Foreign Industrial Targeting," Brookings Papers on Economic Activity, Economic Studies Program, The Brookings Institution, vol. 15(1984-1), pages 77-132.

No abstract available.
Available at:
http://www.brookings.edu/press/Journals/2007/brookingspapersoneconomicactivity12007.aspx

2.54 Paul Krugman, 1983. "New Theories of Trade among Industrial Countries," American Economic Review, American Economic Association, vol. 73(2), pages 343-47, May.

No abstract available.
Available at: http://www.jstor.org/pss/1816867

2.55 Brander, James & Paul Krugman, 1983. "A 'reciprocal dumping' model of international trade," Journal of International Economics, Elsevier, vol. 15(3-4), pages 313-321, November.

This paper develops a model in which the rivalry of oligopolistic firms serves as an independent cause of international trade. The model shows how such rivalry naturally gives rise to "dumping" of output in foreign markets, and shows that such dumping can be "reciprocal" -- that is, there may be two-way trade in the same product.

Reciprocal dumping is shown to be possible for fairly general specification of firm behaviour. The welfare effects of this seemingly pointless trade are ambiguous. On one hand, resources are wasted in the cross-handling of goods; on the other hand, increased competition reduces monopoly distortions. Surprisingly, in the case of free entry and Cournot behaviour reciprocal dumping is unambiguously beneficial.

Available at: http://www.sciencedirect.com/science/article/B6V6D-4FTGCKR-8/2/1466196fb6343b3a8f40c9cb7bbef608

2.56 Paul Krugman, 1982. "'Simulating an oil shock with sticky prices' by Giavazzi et. al," European Economic Review, Elsevier, vol. 18(1), pages 37-39a.

No abstract available.
Available at: http://www.sciencedirect.com/science/article/B6V64-45F62YC-4H/2/c4d6a5b5242462cf68dec15a53fe1067

2.57 Paul Krugman, 1982. "The macroeconomics of protection with a floating exchange rate," Carnegie-Rochester Conference Series on Public Policy, Elsevier, vol. 16(1), pages 141-182, January.

No abstract available.
Available at: http://www.sciencedirect.com/science/article/B6V8D-45F5SJ3-V/2/7f9eb9120a20e2df0e816725372ba07c

2.58 Paul Krugman, 1981. "Intraindustry Specialization and the Gains from Trade," Journal of Political Economy, University of Chicago Press, vol. 89(5), pages 959-73, October.

No abstract available.
Available at: http://www.jstor.org/pss/1830815

2.59 Paul Krugman, 1981. "Trade, accumulation, and uneven development," Journal of Development Economics, Elsevier, vol. 8(2), pages 149-161, April.

No abstract available.
Available at: http://www.sciencedirect.com/science/article/B6VBV-45GNWFM-J/2/43dca5f8a8af07f6626be87e0304e5f7

2.60 Paul Krugman, 1980. "Scale Economies, Product Differentiation, and the Pattern of Trade," American Economic Review, American Economic Association, vol. 70(5), pages 950-59, December.

No abstract available.
Available at: http://www.jstor.org/pss/1805774

2.61 Paul Krugman, 1980. "Vehicle Currencies and the Structure of International Exchange," Journal of Money, Credit and Banking, Blackwell Publishing, vol. 12(3), pages 513-26, August.

No abstract available.
Available at: http://www.jstor.org/pss/1991725

2.62 Paul Krugman, 1979. "A Model of Innovation, Technology Transfer, and the World Distribution of Income," Journal of Political Economy, University of Chicago Press, vol. 87(2), pages 253-66, April.

No abstract available.
Available at: http://www.jstor.org/pss/1832086

2.63 Paul Krugman, 1979. "Increasing returns, monopolistic competition, and international trade," Journal of International Economics, Elsevier, vol. 9(4), pages 469-79, November.

No abstract available.
Available at: http://www.sciencedirect.com/science/article/B6V6D-45DJ12M-4W/2/ecd8fb114c1817e124241bc2c48211b3

2.64 Paul Krugman, 1979. "A Model of Balance-of-Payments Crises," Journal of Money, Credit and Banking, Blackwell Publishing, vol. 11(3), pages 311-25, August.

No abstract available.
Available at: http://www.jstor.org/pss/1991793

2.65 Paul Krugman & Taylor, Lance, 1978. "Contractionary effects of devaluation," Journal of International Economics, Elsevier, vol. 8(3), pages 445-56, August.

No abstract available.
Available at: http://www.sciencedirect.com/science/article/B6V6D-45F8YDK-1N/2/1399ce776bc9a8bd2758e720be7ff545

2.66 Paul Krugman, 1978. "Purchasing power parity and exchange rates: Another look at the evidence," Journal of International Economics, Elsevier, vol. 8(3), pages 397-407, August.

No abstract available.
Available at: http://www.sciencedirect.com/science/article/B6V6D-45F8YDK-1H/2/1cc98ef7f7d5601c0a92d683348b8932

2.67 Rudiger Dornbusch & Paul Krugman, 1976. "Flexible Exchange Rates in the Short Run," Brookings Papers on Economic Activity, Economic Studies Program, The Brookings Institution, vol. 7(1976-3), pages 537-584.

No abstract available.
Available at:
http://www.brookings.edu/press/Journals/2007/brookingspapersoneconomicactivity12007.aspx

3 CHAPTERS

3.1 Paul Krugman, 1995. "Increasing returns, imperfect competition and the positive theory of international trade," Handbook of International Economics, in: G. M. Grossman & K. Rogoff (ed.), Handbook of International Economics, edition 1, volume 3, chapter 24, pages 1243-1277 Elsevier.

No abstract available.
Available at: http://www.sciencedirect.com/science/article/B7P5T-4FKY233-4/2/1bcbe2b49808cddd2a1d8f40da2a7239

3.2 Paul Krugman, 1993. "Recent Thinking about Exchange Rate Determination and Policy," RBA Annual Conference Volume, in: Adrian Blundell-Wignall (ed.), The Exchange Rate, International Trade and the Balance of Payments Reserve Bank of Australia.

No abstract available.
Available at:
http://www.rba.gov.au/PublicationsAndResearch/Conferences/1993/Krugman.pdf

3.3 Paul Krugman, 1989. "Industrial organization and international trade," Handbook of Industrial Organization, in: R. Schmalensee & R. Willig (ed.), Handbook of Industrial Organization, edition 1, volume 2, chapter 20, pages 1179-1223 Elsevier.

No abstract available.

Available at: http://www.sciencedirect.com/science/article/B7P5S-4FD79WP-Y/2/0f7938423936cb07ab8e9c28dca8b888

4 BOOKS

4.1 Masahisa Fujita & Paul Krugman & Anthony J. Venables, 2001. "The Spatial Economy: Cities, Regions, and International Trade," MIT Press Books, The MIT Press, edition 1, volume 1, number 0262561476, 03.

Since 1990 there has been a renaissance of theoretical and empirical work on the spatial aspects of the economy--that is, where economic activity occurs and why. Using new tools--in particular, modeling techniques developed to analyze industrial organization, international trade, and economic growth--this "new economic geography" has emerged as one of the most exciting areas of contemporary economics. The authors show how seemingly disparate models reflect a few basic themes, and in so doing they develop a common "grammar" for discussing a variety of issues. They show how a common approach that emphasizes the three-way interaction among increasing returns, transportation costs, and the movement of productive factors can be applied to a wide range of issues in urban, regional, and international economics. This book is the first to provide a sound and unified explanation of the existence of large economic agglomerations at various spatial scales.

4.2 Paul Krugman, 1997. "The Age of Diminished Expectations, 3rd Edition: U.S. Economic Policy in the 1990s," MIT Press Books, The MIT Press, edition 3, volume 1, number 0262611341, 03.

Paul Krugman's popular guide to the economic landscape of the 1990s has been revised and updated to take into account economic developments of the years from 1994 - 1997. New material in the third edition includes: * A new chapter--complete with colorful examples from Lloyd’s of London and Sumitomo Metals--on how risky behavior can lead to disaster in private markets. * An evaluation of the Federal Reserve's role in reining in economic growth to prevent inflation, and the debate over whether its targets are too low. * A look at the collapse of the Mexican peso and the burst of Japan's "bubble" economy. * A revised discussion of the federal budget deficit, including the growth concern that Social Security and Medicare payments to retiring baby boomers will threaten the solvency of the government. Finally, in the updated concluding section, the author provides three possible scenarios for the American economy over the next decade. He warns us that we live in age of diminished expectations, in which the voting public is willing to settle for policy drift--but with the first baby boomers turning 65 in 2011, the economy will not be able to drift indefinitely.