Problem 1
On infant industry argument

Answers: This question is to show you a good example of a common mistake that people often make in debating/prescribing economic policies, i.e., confusing correlations with causations in economic reasoning. Douglas Irwin of Dartmouth College offers a good critique (attached) of Chang's argument – pay special attention to the underlined sections. Using Chang's method, you will reach the conclusion that "smoking tobacco leads to long lives" - the example used in Irwin's critique (again see attachment).

Problem 2
Interest Parity Condition and Exchange Rate Determination

Answers to problem #9 of Chapter 13

9. a. If the Federal Reserve pushed interest rates down, with an unchanged expected future exchange rate, the dollar would depreciate (note that the article uses the term "downward pressure" to mean pressure for the dollar to depreciate). In terms of the analysis developed in this chapter, a move by the Federal Reserve to lower interest rates would be reflected in a movement from R to R' in Figure 13.5, and a depreciation of the exchange rate from E to E^*.

   If there is a "soft landing," and the Federal Reserve does not lower interest rates, then this dollar depreciation will not occur. Even if the Federal Reserve does lower interest rates a little, say from R to R'' (as shown in Figure 13.6), this may be a smaller decrease then what people initially believed would occur. In this case, the expected future value of the exchange rate will be more appreciated than before, causing the interest-parity curve to shift in from II to $I'I'$ The shift in the curve reflects the "optimism sparked by the expectation of a soft landing" and this change in expectations means that, with a fall in interest rates from R to R'', the exchange rate depreciates from E to E'', rather than from E to E^*, which would occur in the absence of a change in expectations.

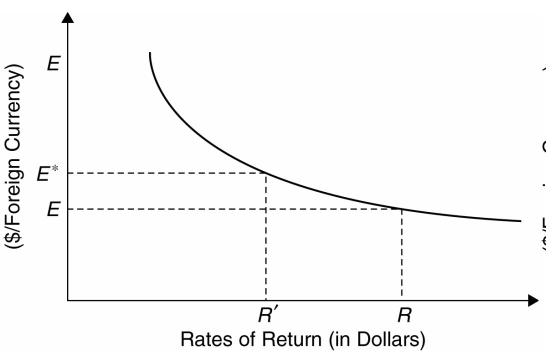

Figure 13.5

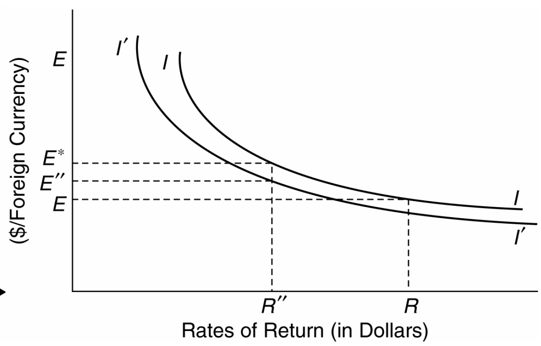

Figure 13.6

b. The "disruptive" effects of a recession make dollar holdings more risky. Risky assets must offer some extra compensation such that people willingly hold them as opposed to other, less risky assets. This extra compensation may be in the form of a bigger expected appreciation of the currency in which the asset is held. Given the expected future value of the exchange rate, a bigger expected appreciation is obtained by a more depreciated exchange rate today. Thus, a recession that is disruptive and makes dollar assets more risky will cause a depreciation of the dollar.

A Critique by Douglas Irwin, Department of Economics, Dartmouth College.

Ha-Joon Chang enlists economic history to mount a provocative critique of the "Washington Consensus" -- the standard set of policy recommendations that aim to promote economic development in poor countries. According to the consensus, developing countries should adopt a set of "good policies" and "good institutions" to improve their economic performance. The good policies include stable macroeconomic policies, a liberal trade and investment regime, and privatization and deregulation. The good institutions include democratic government, protection of property rights (including intellectual property), an independent central bank, and transparent corporate governance institutions and financial establishments. These policies have been embraced by the World Bank, the International Monetary Fund, and many mainstream economists, hence the term Washington Consensus.

Chang highlights the paradox that many of today's high income countries did not pursue such policies when they were climbing the economic ladder of success in the nineteenth century. Rather, these countries implemented high tariffs and sectoral industrial policies, lagged in the introduction of democratic reforms, stole industrial technologies from one another, did not have independent central banks, and so forth. Therefore, in Chang's view, developed countries are hypocritical when they seek to deny developing countries access to these same policy tools and when they urge them to adopt democratic reforms and protect intellectual property.

In some sense, this book pits Adam Smith (free market orthodoxy) against Friedrich List (managed intervention heterodoxy) and comes down on List's side. In Chang's view, developed countries preach Adam Smith's policies to developing countries today but pursued Friedrich List's policies themselves in the past. Developed countries are "kicking away the ladder" (in Friedrich List's memorable phrase) that they used to become richer and instead are trying to foist upon developing countries a set of policies wholly unsuited for their economic condition and contrary to their economic interests. This book has already achieved high status as an iconoclastic critique of neo-liberal "market fundamentalism" as pronounced by establishment economics and international institutions.

Chang, who is Assistant Director of Development Studies at the University of Cambridge (UK), divides his slim book into four chapters. Each chapter focuses on the policies pursued a century ago by the leading rich countries of today (Britain, United States, Germany, Japan, and other European countries) and compares those policies to the ones that developing countries are urged to adopt the Washington Consensus. Chapter One introduces the book and asks "How Did the Rich Countries Really Become Rich?" Chapter Two looks at trade and industrial policies designed to allow developing countries to "catch up" with industrial countries. Chapter Three focuses on institutions and good governance. Chapter Four concludes with lessons from the past.

Chang's book is provocative and interesting, but falls short of persuading. Perhaps the biggest disappointment is Chang's extremely superficial treatment of the historical experience of the now developed countries. He has simply chosen not to engage the work of economic historians on the questions he is raising. For example, chapter one -- "How Did the Rich Countries Really Become Rich?" -- does not contend with the work that economics historians have done on the topic. Given the broad question posed in this chapter, one might have expected Chang to confront such landmark works as Douglass North and Robert Thomas's *The Rise of the Western World* (1973) or Nathan Rosenberg's and L.E. Birdzell's *How the West Grew Rich: The Economic Transformation of the Industrial World* (1986). These works stress the importance of political systems that provide security to economic transactions and economic systems that allow for competition, broadly construed. But Chang does not explain why the lessons from these works are not relevant to developing countries today.

Rather, in chapter 2, Chang elaborates on his contention that "infant industry promotion (but not just tariff protection, I hasten to add) has been the key to the development of most nations ... Preventing the developing countries from adopting these policies constitutes a serious constraint on their capacity to generate economic development." In my view, this statement is erroneous on two counts -- that infant industries were the key to economic development, and that developing countries are prevented from adopting such policies today.

Just because certain trade and industrial policies were pursued and the economic outcome turned out to be good does not mean that the outcome can be attributed to those specific policies. Yet Chang does not advance our understanding beyond this "correlation therefore attribution" approach. Perhaps the success of developed countries came despite the distortions and inefficiencies created by their earlier policies because the broader institutional context was conducive to growth.

For example, the United States started out as a very wealth country with a high literacy rate, widely distributed land ownership, stable government and competitive political institutions that largely guaranteed the security of private property, a large internal market with free trade in goods and free labor mobility across regions, etc. Given these overwhelmingly favorable conditions, even very inefficient trade policies could not have prevented economic advances from taking place. (As Adam Smith once commented, the effort of individuals to improve their condition "is frequently powerful enough to maintain the natural progress of things towards improvement, in spite ... of the greatest errors of administration.")

And yet, in Chang's story, these other things get no credit for America's economic success; rather, it all comes down to infant industry promotion. Chang writes: "Although some commentators doubt whether the overall national welfare effect of protectionism was positive, the U.S. growth record during the protectionist period makes this scepticism look overly cautious, if not downright biased." But, once again, correlation is not causation. Chang produces no evidence that protectionism was responsible for the growth. He does not investigate the various channels and mechanisms by which trade policy affects growth and compare them to other factors leading to economic expansion. He does not undertake a counterfactual analysis to determine the magnitude of benefits and costs of infant industry policies. In the reasoning style of Paul Bairoch, if tariffs were high and growth was strong, then there must be a causal relationship between the two. There is no need to examine alternative explanations, such as whether any effects of tariff policy were swamped by the advantages of other aspects of the American economy. Instead, Chang makes sweeping statements like "It is also clear that the U.S. economy would not have got where it is today without strong tariff protection at least in some key infant industries."

The implication is that protecting manufacturing industries accounts for the success of rich countries. But Stephen Broadberry (1998) has shown that the United States overtook the United Kingdom in terms of per capita income in the late nineteenth century largely by increasing labor productivity in the service sector, not by raising productivity in the manufacturing sector. Broadberry's research is not obscure, yet Chang makes no note of it.

Attributing the economic success of various other countries to their trade and industrial policies alone grossly inflates their role. In Europe, Broadberry and others have showed that growth was related to the shifting of resources out of agriculture and into industry and services. Yet trade policies may have slowed this transition for some countries. Britain industrialized with the textile industry in the late eighteenth and early nineteenth century, but the Corn Laws during this period kept more labor and capital resources in agriculture, not industry. Similarly, to the extent that Germany's tariff code protected agricultural goods (where it was a net importer), it actually slowed that transition and may have retarded growth in the late nineteenth century.

A broader problem afflicts Chang's approach -- sample selection bias. Chang only looks at countries that developed during the nineteenth century and a small number of the policies they pursued. He did not examine countries that failed to develop in the nineteenth century and see if they pursued the same heterodox policies only more intensively. This is a poor scientific and historical method. Suppose a doctor studied people with long lives and found that some smoked tobacco, but did not study people with shorter lives to see if smoking was even more prevalent. Any conclusions drawn only from the observed relationship would be quite misleading. Chang also overstates the degree to which developing countries today are prevented from pursuing interventionist trade and industrial policies. Trade agreements such as the General Agreement on Tariffs and Trade (GATT) pose few barriers to countries that wish to pursue activist trade policies, and indeed many countries did so during the years when import substitution was the rage among developing countries in the 1950s and 1960s. Article XVIII of the GATT allows governments to undertake trade measure to promote development, including the promotion of selected industries. Many countries are choosing not to do so because their past experience with such policies has not been successful.

No economic historian will deny the importance of lessons from history in guiding policy today. The question is "which" economic history is relevant. (This point was raised in some insightful comments on Chang's work by Ken Sokoloff at last year's EHA meeting.) Which historical experience is most relevant for developing countries in Asia, Latin America, and Africa today -- the perceived failure of state-led development and import substitution in those countries in recent decades, or the experience of Britain and the United States in the nineteenth century? Certainly China and India have answered by saying that their past policies of inward-looking socialism have failed them. Both countries have done better over the past decade or two by shedding heavy-handed government involvement in regulating the economy and allowing a greater role for market forces, even though they have not embraced every aspect of the "Washington Consensus." In particular, China and India have decided to become much more open to world trade and investment and have reaped benefits by exposing long protected "infant industries" to global competition.

Even if the policy lessons of the distant past are relevant, it is unwise to make policy recommendations based on America's experience a century ago without appreciating the broader institutional context of the U.S. growth experience and its differences from many developing countries today. In the U.S. case, competitive political institutions and limited government prevented policymakers from pursuing highly damaging policies. Governments in developing countries that are unaccountable, or possess unchecked power, can implement policies that have the potential to impose much greater costs on society for much longer periods of time.

This book raises a fascinating set of questions and succeeds in being provocative, but I think it ultimately fails to be convincing. If Chang had focused in-depth on one particular question, such as the degree to which protectionist policies account for the success of today's developed countries, and came to terms with the work of economic historians more directly, he might have made more of a contribution.