



Against the Consensus

In June 2008 Justin Yifu Lin was appointed chief economist of the World Bank, right before the eruption of the worst global financial and economic crisis since the Great Depression. Drawing on experience from his privileged position, Lin offers unique reflections on the cause of the crisis, why it was so serious and widespread, and its likely evolution. Arguing that conventional theories provide inadequate solutions, he proposes new initiatives for achieving global stability and avoiding the recurrence of similar crises in the future. He suggests that the crisis and the global imbalances both originated with the excess liquidity created by US financial deregulation and loose monetary policy, and recommends the creation of a global Marshall Plan and a new supranational global reserve currency. This thought-provoking book will appeal to academics, graduate students, policymakers, and anyone interested in the global economy.

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Reflections on the Great Recession

JUSTIN YIFU LIN



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Preface

I was the first person from the developing world to be appointed chief economist of the World Bank, a position traditionally held by renowned economists from the West. My tenure started in June 2008, right before the eruption of the worst global financial and economic crisis since the Great Depression. The position at the World Bank required me to explore the causes and a way out of the crisis. In this book I present a perspective that may be new to people accustomed mainly to Western points of view.

Let me explain why I wrote this book.

As an intellectual from the developing world, I used to believe, like the monk in the classic Chinese epic novel *Journey to the West*, that the West had a holy sutra, which I needed only learn and apply to help my native country modernize and prosper. I felt fortunate to have the opportunity, just as China was beginning to transition from a centralized economy to a market economy, to study modern economics with the masters – including several Nobel laureates – at the University of Chicago, a global center of modern economic research.

Soon thereafter, PhD in hand, I was ready to apply my knowledge to real-world problems at home. Instead, I was confronted by events that contested the very applicability of modern economics in my country. In 1988, after a decade of reforms, China experienced its first episode of double-digit inflation. The orthodox inflation-fighting response would be to raise interest rates to cool down overheating investment and discourage consumption. Instead, the government adopted a retrenchment program and administratively cut back many investment projects, leaving them wastefully uncompleted. Evaluated against macroeconomic theory, the government's behavior was irrational.

Modern economics is premised on rationality – the belief that all economic agents act rationally. If the Chinese government had acted irrationally, the modern economics would be inapplicable in China. But, if the Chinese government did act irrationally, how did its policies

lead to a decade of 10 percent average annual growth following the reforms begun in 1979? The answer, clearly, is that it acted rationally in response to constraints that differed from those assumed in the existing theoretical models taught in school.

Theodore W. Schultz, my mentor at the University of Chicago, had a similar experience. Before his seminal work, peasants in agrarian economies were considered irrational because they would not save and invest like “rational” farmers in modern society. His research found that in fact it was rational for peasants in a traditional agrarian economy not to save, because without technological advances the marginal return to saving was close to zero. His insight revolutionized agricultural economics and policy.¹

So, assuming that the Chinese government acted rationally, why was it reluctant to raise interest rates and why did it create other market distortions? Because the survival of many large state-owned enterprises depended on the implicit subsidies supplied through low-interest-rate loans and other intentional distortions. These large state enterprises, capital-intensive in defiance of China’s comparative advantage in labor-intensive activities, were not viable in an open, competitive market. They were a product of China’s strategy during the 1950s, when it was still a poor agrarian economy, to overtake the United Kingdom in ten years and catch up with the United States in fifteen years.

Following modern macroeconomic theory to raise interest rates or implementing shock therapy to remove other distortions based on the Washington consensus would have bankrupted most state enterprises, resulting in widespread unemployment and social and political unrest. Although academia dismissed China’s dual-track approach to transition (protecting nonviable firms in the old priority sectors while liberalizing entry into sectors consistent with China’s comparative advantages), the Chinese government saw it as the only approach that could achieve both stability and dynamic growth. I wrote about this insight in *The China Miracle: Development Strategy and Economic Reform*, published in 1996, and later in *Demystifying the Chinese Economy*, published in 2011.

¹ The previous policy recommendation was to change farmers’ irrational behavior in order to modernize agriculture in traditional economies. Schultz’s finding suggested that the right policy should be providing farmers with modern technology (Schultz 1964).

The enlightenment from China's response to the inflation of 1988 inspired me to adopt a *changwu* attitude, observing the world as though seeing it for the first time through a newly born baby's eyes, without preconceived notions. When considering a policy issue, instead of applying current theories or conventional interpretations of experience, I tried to construct a causality model anew by myself each time by identifying the agents behind the phenomenon, the goals they wanted to achieve, the constraints they faced, and the options they had, as I describe in my recent book *Benti and Changwu: Dialogues on Research Methodologies in Economics*.

China's miraculous growth and increasing global influence in the world helped propel me to the position of chief economist of the World Bank. My mandates were to be the World Bank president's chief economic advisor, to lead the World Bank's intellectual work on development economics, and, by helping developing countries achieve sustainable, dynamic, and inclusive growth, to rid the world of poverty. Despite the rise of multiple growth poles in the first decade of the new century that include some emerging market economies, most countries in Africa and other parts of the world remain trapped at low income levels, unable to narrow the income gap with advanced economies. Before the crisis erupted, I thought my main challenge was to find ways to help these poor countries improve their development performance.

I started my job by visiting South Africa, Rwanda, and Ethiopia in the first week of my tenure. But my plans for devoting myself to promote economic development in poor countries were soon interrupted by the collapse of Lehman Brothers and the ensuing global financial and economic crisis. Its depth and length were not foretold by conventional economic theories. *Changwu* helped me understand the crisis and propose a way out.

When I arrived in Washington in June 2008, the surge in food and fuel prices was grabbing all the headlines. I asked my colleagues whether deflation was likely to follow once inflation had been arrested. Most economists found the question bewildering, because of their confidence in the Great Moderation – a phenomenon believed to reflect the high-income country governments' mastery of macroeconomic policies to smooth the business cycle in the last two decades before the crisis. As conditions worsened after the collapse of Lehman Brothers in September 2008, I suspected that the world might suffer from a

protracted recession due to the large excess capacity built up during the extraordinary boom before the crisis. I proposed a global initiative to invest in bottleneck-releasing, productivity-enhancing infrastructure projects – what I called “beyond Keynesianism” – as a countercyclical measure to restore growth. Believing that the crisis would last three to seven quarters at most, like other crises in the past half-century, most economists advised governments to follow conventional measures, relying on automatic stabilizers while strengthening social safety nets to protect the poor and vulnerable. Through the coordinated efforts of the G20 (Group of Twenty leading economies) governments, there was a green sprout of recovery in the first half of 2010. When the International Monetary Fund recommended in fall 2010 that crisis-afflicted countries retrench fiscally, I argued that the focus should be on improving the quality of fiscal stimulus instead, otherwise slowing growth and mounting fiscal deficits would likely follow. Today the world’s attention is fixed on the Eurozone debt crisis, but I worry that, if we don’t take the beyond Keynesianism measure that I advocated at the onset of the crisis now, the entire world may be on the road to a protracted “new normal” or even “lost decades.”

This book presents my analysis of the roots of the economic crisis and stalled growth and proposes win-win solutions that will lead to global stability and sustainable development.

I conducted most research in the book during my tenure as chief economist of the World Bank. I would like to thank my World Bank colleagues, Vandana Chandra, Jean-Jacques Dethier, Doerte Doemeland, Shahrokh Fardoust, Vivian Hon, Celestin Monga, Zia Qureshi, David Rosenblatt, Volker Treichel, James Trevino, and Yan Wang, for their invaluable contributions to my research and preparation of the book. I am also grateful to Meta de Coquereaumont and Bruce Ross-Larson for an excellent editorial review.

Overview

Monolithic explanations of international development increasingly fall short in describing today's diverse, multipolar world. This book reflects an attempt to "emancipate our minds, seek truth from facts, proceed from reality in everything," as Deng Xiaoping famously said, by presenting a view that may be new to people accustomed mainly to Western perspectives. The book analyzes the roots of the current global crisis and proposes win-win solutions that will lead to development and global stability.

In fall 2008 the world was rocked by the eruption of the worst global financial and economic crisis since the Great Depression. Unless we can understand the roots of this Great Recession and its likely evolution, the correct policy responses to prevent a recurrence will elude us. The commonly accepted explanations for the crisis are inconsistent with the empirical facts. Had the academic and policy community understood or been willing to face the true causes and taken prompt and effective action, the crisis could have been prevented or moderated.

What caused the 2008–9 global crisis?

The recent crisis began in the United States with a financial system meltdown following the bursting of the housing bubble. The crisis was preceded by a dramatic rise in current account imbalances, which was commonly accepted as the cause of the crisis. These global imbalances were believed to originate in East Asian economies' export-oriented strategies and accumulation of foreign reserves as self-insurance after the 1998 crisis and especially in China's undervalued exchange rate. These global imbalances and the purchase of Treasury bills with excess reserve accumulations, so the thinking went, led to cheap credit and a housing bubble in the United States.

Global imbalances did not arise in East Asia. . .

Though plausible at first glance, there were good reasons to doubt these explanations. East Asian economies had been pursuing similar development strategies for more than half a century, but trade surpluses ballooned only in the decade before the crisis. If East Asian self-insurance and China's undervalued currency were the causes of the global imbalances, countries competing with the East Asian economies should have reduced their trade surpluses and reserves. Yet, in the decade before the crisis, other economies' trade surpluses rose as well, shrinking East Asia's contribution to the US trade deficit from 51 percent in the 1990s to 38 percent in the 2000s. Almost all countries except the United States increased their trade surpluses or reserves. Globally, reserves rose from \$1 trillion in 2001 to \$7 trillion in 2007. The only way for all countries to increase their reserves simultaneously was for the reserve currency countries (mainly the United States) to increase the supply of reserve currencies.

I have a different view. The combination in the United States of financial deregulation (starting in the 1980s), which allowed high leverage, and low interest rates (following the bursting of the dot-com bubble in 2001) led to a large increase in liquidity and fed the housing bubble of the 2000s. The wealth effect from the housing bubble and from financial innovations that sprung up under lax supervision supported excessive household consumption. This new consumption surge, along with deficit financing of the wars in Iraq and Afghanistan, generated large US trade deficits and global imbalances. The United States was able to finance the large-scale imbalances for so long only because the dollar was the main reserve currency.

The excess liquidity sloshing around the United States also contributed to large gross capital outflows to other countries, supporting growth and booms in their investments and equity markets. The dollars obtained through trade surpluses and capital inflows in nonreserve currency countries could not circulate directly in their domestic markets but had to be converted to the local currency and held as central bank reserves. Those reserves then flowed back to the United States to buy US Treasury bills or to invest in US financial markets. These return flows fed the impression that low US interest rates were caused by the excess accumulation of reserves in nonreserve currency countries. When the

housing bubble burst in the United States and the financial system collapsed, a global crisis erupted.

Financial deregulation and liberalization also swept over Europe. Major European banks established branches in eastern and southern Europe, using high leverage to support housing bubbles and consumption booms. The booms also benefited from the adoption of the euro. When the banks started to deleverage after the crisis, eastern and southern Europe suffered severely, and several countries remain mired in a sovereign debt crisis.

...or in China

As early as 2003 academics and policymakers in high-income countries began pointing at China as the culprit behind the mounting global imbalances, even though China did not begin to amass a large trade surplus until 2005.

China's large current account surplus reflects mainly its high domestic savings. The hypotheses about China's high saving rate – such as its aging population and the lack of a well-developed social safety net – focus on incentives for household saving. But these cannot be the main explanations, because, at an amount equivalent to 20 percent of gross domestic product (GDP), household savings are no higher in China than they are in India and many other countries. What makes China's saving pattern unique is the large share of corporate savings, a result of surplus labor in the traditional sector, and continuing distortions that favor large state corporations, a legacy of China's dual-track reform. Surplus labor kept corporate profits and savings high by preventing wages from rising as the production of tradables expanded rapidly. Corporate savings also benefited from implicit subsidies to large corporations (a result of the financial system serving big firms), low taxation of natural resources, and unregulated monopolies in some sectors.

A win-win path to recovery

The world's attention is concentrated on whether countries in the Eurozone can produce stabilization packages large enough to rescue the southern European countries in debt crisis and whether those countries will roll out structural reforms to boost their competitiveness.

Without structural reforms, stabilization measures just buy time; problems will inevitably recur, and with ever greater ferocity.

The challenge of structural reforms

But here is the challenge: structural reforms are contractionary and may cut more deeply into jobs, economic growth, and government revenues already hurt by the recession, at least in the near term, with dire social and political consequences. This means that structural reforms are not politically feasible in many countries. And, even if implemented, reforms may not shrink the fiscal deficit. Social spending generally increases in response to rising unemployment and the drop in fiscal revenue that occurs when growth slows. The market will respond negatively to the rising public debt, especially if the reforming country's currency is not a reserve currency or if the country has no independent monetary policy, as in the Eurozone, and is unable to monetize its debt.

The standard recommendation by the International Monetary Fund (IMF) has long been to offset the contractionary effects of structural reforms by devaluing the currency to increase export demand. And, for a small economy, that policy prescription can work if the global economy is sound. But devaluation is not an option for individual countries in southern Europe, despite being theoretically feasible for the Eurozone as a whole. And any attempt at currency devaluation in the Eurozone to create space for structural reform could trigger competitive devaluations, as Japan, the United States, and many other countries are also beset with high unemployment and structural problems.

Without structural reform, the debt-ridden countries in southern Europe are likely to require repeated and increasingly large rescue packages, which will unavoidably be monetized by the European Central Bank. And, unless Japan and the United States undergo their own structural reforms, they will continue their loose monetary policies to keep interest rates low so as to support the financial system, help indebted households, and reduce the cost of raising and serving public debt. The likely outcome is that the Eurozone, Japan, and the United States will all be trapped in a protracted new normal of slow growth, high risk, and low returns to financial investment. Low interest rates will also encourage short-term speculative capital flows to international commodity markets (resulting in volatile prices) and to emerging

economies (causing asset bubbles, currency appreciation, and difficulties in macroeconomic management).

Beyond Keynes: global investment in infrastructure

To avoid these dismal consequences, high-income countries must stimulate demand to create the space for structural reforms. With a glut in housing stock and excess capacity in construction and manufacturing in almost every high-income country, public or private debt restructuring and fiscal consolidation should not be the priority. Countries should instead promote sustainable job creation and growth through investment to create demand for construction and capital goods and restore consumer confidence.

To avoid the rapid accumulation of public debt, as in Japan during its “lost decades” after 1991, countercyclical fiscal stimuli should be applied in a way that goes beyond Keynes, as I advocated at the beginning of the global crisis. Fiscal policies should be proactive and countercyclical, focusing on projects that create jobs today and enhance productivity tomorrow, especially in infrastructure, green sectors, and education. Monetary policy should accommodate fiscal needs. Because the resultant faster growth and higher government revenue in the future can be used to pay back the costs incurred today, paying for these policies will not become a tax burden on future generations.

Domestic productivity-enhancing investment opportunities are limited in high-income countries and may not be large enough to pull them out of the crisis. In developing countries, however, opportunities for productivity-enhancing infrastructure investments abound. In today’s closely connected world, investments in developing countries will generate demand for the exports of high-income countries, with an effect similar to that of currency devaluation. Except for a few emerging market economies, however, most developing countries are constrained by a weak fiscal position or low foreign reserves and require outside investment funds. Thus the second implication of the beyond Keynes approach is for the advanced economies to create facilities for supporting investments in developing economies in order to reap gains for both sets of countries.

The world needs a Marshall Plan to stimulate global investment in infrastructure to release bottlenecks to growth in developing countries and to create space for structural reforms in high-income

countries. Instead of simply putting out one fiscal fire after another in sovereign debt crisis countries through emergency IMF financing and other rescue packages, the G20 should provide parallel funds to multilateral development banks, including the World Bank and regional development banks, with the capacity to design and implement infrastructure investment projects. The investment funds should come from reserve-issuing and reserve-rich countries. In today's global economy, infrastructure projects are good investments for private sector funds, including pension funds and sovereign wealth funds. In addition to an active role in selecting and designing projects and making them attractive to private investors, the multilateral development banks and governments could create innovative arrangements to leverage private funds. Such infrastructure investments on a global scale are a win-win strategy for developed and developing countries alike – for today and tomorrow.

How poor countries can catch up: flying geese and leading dragons

A global push for infrastructure investments in developing countries will work only if developing countries can grow dynamically in the coming decades. But do they have the space to do so in today's uncertain, stressful global economy? And, if so, how do they seize the opportunity and then sustain their growth?

The low- and middle-income traps

Before the Industrial Revolution, per capita income was fairly evenly distributed; it was only a few times higher in the richest countries than in the poorest. Then incomes began their great divergence. A few Western industrialized countries took off and came to dominate the world economic and political order. Until 2000 the G7 contributed about two-thirds of global GDP measured in market exchange rates and about one-half measured in purchasing power parity (PPP).

Since 2000 we have seen the rise of a multipolar world, with China and a few other large developing countries driving global growth and recovery in the current global crisis. But only a handful of East Asian economies have advanced from low-income agrarian economies to middle-income newly industrialized economies and toward

high-income advanced industrialized economies. Between 1950 and 2008 only twenty-eight economies reduced their per capita income gap with the United States by at least ten percentage points – and only twelve of these were neither western European countries nor oil- or diamond-producing small countries. The other 150 plus countries have been trapped at the middle- or low-income level.

The rise of a multipolar growth world is thus the result of dynamic growth in just a few middle-income countries with large populations. Whether the new growth pole countries can avoid the middle-income trap and whether other developing countries can maintain dynamic growth are crucial questions for global recovery and for the viability of a global infrastructure initiative. The main global development challenges remain reducing poverty, achieving the Millennium Development Goals, and narrowing income and other human development gaps between low- and middle-income countries and high-income countries.

Flawed development theories

Developing countries have for decades been trying to catch up with the industrialized high-income countries – to achieve sustained dynamic growth. Under the prevailing development thinking, governments have been advised to adopt import substitution policies, intervening to overcome market failures, and to accelerate industrialization since World War II. This early development thinking can be labeled “development economics 1.0.” Countries following this approach had some initial successes, but these were quickly followed by repeated crises and stagnation. The dominant development thinking then shifted to neo-liberalism, as summed up in the Washington consensus in the 1980s. Reforms in governance and the business environment were intended to transfer to developing countries the idealized market institutions of industrialized high-income countries. These policy prescriptions can be labeled “development economics 2.0.” The result was lost decades of growth in developing countries.

Responding to the persistence of poverty in developing countries, the global development community focused its aid increasingly on education and health programs, seen as important humanitarian concerns. As these human development programs failed to achieve their intended project results, development research began to emphasize randomized

controlled experiments to improve service delivery. This trend can be labeled “development economics 2.5.” North Africa’s experience with strong education advances but lagging growth and job opportunities calls into question the validity of this approach.

The few developing economies that industrialized and grew dynamically after World War II – most of them in East Asia – followed an export-oriented development strategy rather than the prevailing import substitution strategy. Cambodia, China, Mauritius, and Vietnam, which achieved stability and dynamic growth in their transition from a planned to a market economy, followed a gradual, dual-track approach rather than the shock therapy advocated by the Washington consensus. They continued to protect firms in priority sectors while liberalizing entry in other sectors, but they often perform poorly on governance and business environment indicators. The successful developing countries made enormous advances in education, health, poverty reduction, and other human development indicators, and none used randomized controlled experiments to design their social and economic programs.

A better way: comparative advantage – following industrialization

The lesson? We need to rethink our economic development theories and policies. The rapidly widening income gap between Western countries and the rest of the world is a result of their rapid increase in per capita income, reflecting the accelerated structural changes in industry and technology made possible by the Industrial Revolution. The few countries that were not oil- or diamond-producing economies that greatly narrowed the income gap with the United States also achieved similar structural changes. Modern economic development is a process of continuous change in structure, including technologies, industries, and institutions.

Development thinking has focused on what developing countries do not have and developed countries do (capital-intensive industries), on what developing countries cannot do well and developed countries can (Washington consensus policies and governance), and on areas that do not contribute directly to structural change in developing countries but are viewed as humanitarily important by high-income countries (health and education). The shift in development thinking and projects

away from trying to understand the determinants of structural change and to facilitate these changes is a shift too far. Development economics should build on Adam Smith's insights (remember that he called his book *An Inquiry into the Nature and Causes of the Wealth of Nations*), looking closely at the causes of structural change and the process of economic development, which reflect the nature of modern economic growth. I propose a move to "development economics 3.0," which focuses on what developing countries have (their endowments) and areas in which they can do well based on their (latent) comparative advantage (as determined by their endowments), to allow them to initiate a process of dynamic structural change.

In a globalized world, a country's optimal industrial structure – one in which all industries are consistent with the country's comparative advantages and are competitive in domestic and international markets – is endogenous to its endowment structure at a specific time. Achieving that optimal structure requires a well-functioning market so that firms can follow the country's comparative advantages in their choices of activities and technologies. If firms can do that, the economy will be competitive, capital will accumulate as rapidly as possible, the economy's endowment structure and comparative advantages will change, and the economy's industrial structure will need to become more capital-intensive. Changing the industrial structure requires upgrading hard and soft infrastructure to reduce transaction costs. Upgrading entails externalities and coordination issues that firms cannot internalize in their individual decisionmaking, so governments will need to be actively involved.

Successful economies in East Asia and western Europe followed the flying geese pattern in dynamically industrializing their economies and narrowing the gap with developed countries. In US and western European industrialization, the United Kingdom was the lead goose and Germany, France, and the United States were the followers. By following carefully selected lead countries, latecomers can emulate the flying geese pattern that has enabled trailing economies to catch up since the eighteenth century, by building up industries that are growing dynamically in more advanced countries with endowment structures similar to theirs. The economic failures of many developing countries after World War II stemmed from their misguided attempts to adopt comparative-advantage-defying import substitution strategies instead. This strategy not only prevented them from benefiting from the

latecomer advantage in upgrading to their areas of comparative advantage but also generated distortions and induced rent-seeking practices to protect nonviable firms in priority sectors. Washington consensus reforms such as privatization and financial sector liberalization failed because they overlooked the endogeneity of the distortions and the need for the government to facilitate industrial upgrading.

China had adopted a comparative-advantage-defying strategy before the 1979 reforms, and performed poorly. Its performance turned around after 1979, however, when it adopted a dual-track approach to transition, giving transitory protections to nonviable firms in old priority sectors and facilitating private firms' entry to new latent comparative advantage sectors. Other countries that followed a similar transition strategy also performed well. Now, as China absorbs its surplus labor and wages rise accordingly, it will need to transition from labor-intensive industries to increasingly more capital- and technology-intensive sectors. Due to China's huge size, this will open a large space for low-income developing countries still in their labor-intensive industrialization development phase. This new phenomenon has been called the "leading dragon" pattern. If Brazil, India, Indonesia, and other large middle-income countries maintain their current pace of growth, the same opportunities for low-income countries can emerge in other regions.

If governments set up a policy framework for private sector activities that is attuned to a country's comparative advantage, poorer countries in sub-Saharan Africa and southeast Asia could also start a process of labor-intensive industrialization, growing at 8 percent or more for several decades. The "Growth Identification and Facilitation Framework," which I developed at the World Bank, advises governments on how to facilitate this development.

Toward a brave new international monetary system

The 2008–9 global economic and financial crisis highlighted major deficiencies in the international monetary system. And, although the system appears to have weathered the initial shock, it remains fragile. The global imbalances arising from the excess liquidity created by financial deregulation and monetary policy in the United States were so large and lasted so long because of the reserve currency status of the