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Rebalancing China's growth: some unsettled questions

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Rebalancing China's growth: some unsettled questions

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ABSTRACT China's leadership has spoken for much of the past decade about the need to 'rebalance' the economy and put it onto a different growth path, with domestic consumption as a leading driver of growth. This paper analyses two questions in this regard. The first is how to best to characterise China's existing growth path. China is typically considered to be an export-led economy par excellence. However, the results of the growth accounting approach are reviewed which question this characterization. Second, if China wishes to shift growth paths then, on the basis of insights generated by post-Keynesian growth models, I conclude that a shift to a consumption-driven (wage-led) growth path may be much more problematic than is generally assumed.

Keywords: China; economic growth

RÉSUMÉ Durant la dernière décennie, les autorités chinoises n'ont cessé de communiquer sur la nécessité de rééquilibrer l'économie chinoise et de la mettre sur une différente trajectoire de développement, en faisant de la consommation domestique une des sources majeures de la croissance. Cet article en explore deux problématiques. D'abord, on s'interroge sur la meilleure façon de caractériser l'économie chinoise. En effet, alors que la Chine est communément perçue comme un pays exportateur, des études récentes démontrent le contraire. Ensuite, on explore les autres trajectoires de développement susceptibles d'être empruntées par la Chine. Il semble, sur la base des conclusions des modèles de croissance post-keynésiens, qu'un changement de trajectoire de croissance en Chine serait plus problématique que ce qui est généralement admis.

> "To revamp the economic development mode, we need to adjust the demand structure. And *enlarging the domestic consumption will be the very solution*. So in the 12th Five Year Plan, we highlight the importance of long-term consumer demand". (Emphasis added).
>
> –Zhang Ping, Chair of the National Development and Reform Commission, 14 March 2011 (as quoted in National People's Congress 2011).

China's leadership has talked for most of the past decade about the need to 'rebalance' China's economy, change its structure and put it onto a different growth path. As the above quotation from Zhang Ping, Chair of the National Development and Reform Commission, China's top

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economic planning body, indicates, this new growth path is to be based on increasing domestic consumption as a leading driver of growth. One of the main features of China's 'rebalancing', therefore, is to rely more on internally generated consumer demand as a growth driver. To achieve this, raising consumers' income and a redistribution of income towards them will be required, and the Chinese government has introduced many policy initiatives over the past decade designed to achieve this.

Despite this, private consumption in China has continued to fall as a percentage of GDP and what is remarkable about China's GDP composition in international comparative perspective is the low level of private consumption. At approximately 35 per cent, it is the only country in Asia (with the exception of Singapore) where this value is less than 50 per cent (Prasad 2009, Table 1).[1]

If China wishes to change its growth path a closer examination of its growth dynamics and the possibilities for changing them is required. In this paper, I analyse two questions in this regard. The first is how best to characterise China's existing growth path. The second is the ease with which China can shift growth paths.

With respect to the first question, China is typically considered to be an export-led economy par excellence. However, the results of the growth accounting approach are reviewed which cast considerable doubt on whether China can be classified as an export-led growth economy. Second, if China wishes to shift growth paths then, on the basis of insights generated by post-Keynesian growth models, I conclude that a shift in growth paths in China may be much more problematic than is generally assumed. This conclusion is reached by considering some 'stylized facts' about the Chinese economy and is an area where further econometric research would be fruitful. Contrary to claims made in much of the literature, it is premature to consider either of the two questions examined here as being settled.

The next section provides a brief review of the reasons why China's leadership wants to change the country's growth path and the policies which it has designed to effect this change. I show that this has been a consistent objective of China's policy makers for the past decade and became more prominent with the ascent of the Wen-Hu leadership in 2003. In the paper's third section, the growth accounting approach is analysed to classify China's current growth path. In the final section, I discuss the implications of post-Keynesian growth models for assessing the possibilities of changing China's growth path in the future.

China's growth path: forces for change

The intentions of China's leadership to change the growth path can be readily seen by the objectives set in the most recent Five Year Plans. In the 10th Five Year Plan, for example (2001–2006), there was considerable talk of the need to make 'readjustments' to the growth path. These included a greater role for the service sector, addressing regional issues with increased importance given to western development and addressing rural–urban inequalities. Together, these readjustments would serve to increase domestic demand as a source of growth. This was made clear as being both the means to, and purpose of, economic growth by Premier Zhu Rongji when announcing the Plan:

> Raising the people's living standards in both urban and rural areas is the basic goal of our economic development and a crucial factor for expanding domestic demand and stimulating sustained economic growth. We must give priority to raising the people's living standards. To accomplish this we must create more jobs, increase personal income, distribute income more equitably, improve the social security system, and ensure a more comfortable life for the people (Zhu 2001).

This shift towards a greater concern for the domestic market reflects two goals: (i) to make the benefits of growth available to citizens and (ii) to reduce the reliance on international markets. As reported in the *China Daily* (2001):

> The new Five Year Plan makes the expansion of domestic demands a 'long-term' principle of strategic importance. The intrinsic logic is that expanding domestic demand would provide greater leeway for maneuver and enhance the resistance against international economic risks in the complicated and capricious international environment.

The vulnerability of an overreliance on exports had been illustrated in the Asian Financial Crisis and responding to this, as well as a concern for regional and rural–urban inequalities, the leadership signalled a change in growth direction. This change in direction became much more explicit, and the concern with rising inequalities more pronounced, with the transition to the Hu-Wen leadership in 2003.

Ma Kai, the Minister of the National Development and Reform Commission, made the new growth path clear when announcing the 11th Five Year Plan in 2006. In enumerating the objectives of the new Plan he stated:

> First, we will promote development by relying on the expansion of domestic demand, take the expansion of domestic demand, especially consumption, as a major driving force, and transform economic growth from being driven by investment and export to being driven by consumption, investment, domestic and foreign demand combined in a balanced manner (Ma 2011).

Noting that the share of domestic consumption had fallen during the previous Plan from 61.5 to 50.7 per cent, he revealed that the aim would be to reverse this trend – "adjust the relationship between investment and consumption" – and in so doing, "strengthen the driving force of consumption in economic growth". This was to be achieved by increasing consumption through income growth, "particularly of rural residents and low-income population in urban areas", and more generally by engaging in income redistribution policies (Mai 2011).

In the 12th Five Year Plan (2011–2015) this shift is re-confirmed with a policy priority described as being to "establish [the] long term mechanism of expanding domestic demand" and to

> Create [a] positive consumption environment by actively yet steadily accelerating urbanization, implementing the strategy of employment as priority, deepening the distribution reform and improving social security system, gradually make the overall size of our domestic market ranks among the largest internationally (China direct 2011).

The role of income redistribution and the provision of social security as mechanisms to reduce savings rates and boost consumption, as set out in the 12th Five Year Plan, represent a continuation of the themes set out in the 11th Five Year Plan. The latest Plan also echoes the 10th Five Year Plan in its stress on the importance of the service sector and calls for western regional development. There has been a consistent policy thrust over the past 10 years, and extending into the next five to move to a more balanced growth path in which consumption plays a greater role and investment and exports a lesser role.

Some of the measures and targets set out in the Plans to achieve these objectives are indicated in Table 1.

To these medium term policies, we can add the boost to domestic demand given by the short-term stimulus package introduced in response to the 2008 global financial crisis. The crisis reinforced the vulnerabilities China faces from excessive reliance on export growth and reinforced the importance of giving a greater role to domestic consumption as a growth driver.

The measures set out in the Five Year Plans, supplemented by the stimulus package and supported by a raft of other policy measures such as the 'Go West' strategy and the abolition of agricultural taxes, have formed part of a consistent set of domestically driven policies aimed at reducing income inequality and external vulnerability by pushing China onto a consumption-

Table 1. China's Five Year Plans: selected measures and targets.

Plan	Selected measures and targets
10th Five Year Plan (2001–2006)	• Increase medical and health services • Create 40 million urban jobs • Increase net per capita income of urban and rural residents by 5 per cent per annum
11th Five Year Plan (2006–2011)	• Increase urban basic pension scheme to cover 223 million urban residents (up from 174 million) • Increase coverage of rural cooperative medical care scheme from 23.5 per cent to over 80 per cent of the rural population • Create 45 million urban jobs • Increase net per capita income of urban and rural residents by 5 per cent per annum
12th Five Year Plan (2011–2015)	• Build 36 million low-income housing units • Increase basic pension coverage to 375 million urban residents and all rural resident • Create 45 million urban jobs • Increase the minimum wage rate by at least 13 per cent per annum

driven growth path.[2] To this we can also add international pressures which have pushed China in the same direction.

The emergence of 'global imbalances' first attracted the attention of the International Monetary Fund in 2002 and these have dominated discussion of international policy coordination since. China's export surpluses and high domestic saving rates have been seen as obstacles to sustainable global growth and, indeed, as causes of the global financial crisis itself. With respect to solving the global imbalances, the chair of the US Federal Reserve, Ben Bernanke (2007), argued that "as the global perspective makes clear, the reduction of the US current account deficit also requires efforts on the part of the surplus countries to reduce the excess of their desired saving over desired investment". Needless to say, China figured heavily in this account. Bernanke (2007) continued, with specific reference to China, that "Chinese saving rates rose rapidly (by more even than investment rates); that rise in saving was, perhaps, a result of the strong growth in incomes in the midst of an underdeveloped financial sector and a weak social safety net that increases the motivation for precautionary saving". The international community has, therefore, also been vocal in encouraging China to address its export surplus and high saving rates and to boost domestic consumption.

Parenthetically, this analysis also resonates with heterodox/radical critiques. For example, Blackburn (2009, p. 129) pronounced starkly in what he admits is 'crude thinking', that "the root cause of the [global financial] crisis was, quite simply, poverty. If Chinese direct producers had been better paid they would have furnished a larger and growing market, in ways that would have benefitted the PRC's trading partners". Wade, among others, has called for more emphasis on domestic demand-led growth in developing countries, including – or especially – in China (Wade *et al*. 2009).

The desired direction of policy change is therefore clear. But what of China's growth path now widely described as one of export-led growth? I analyse this in the next section by applying the growth accounting approach.

The growth accounting approach

Despite the prevalence of discussion of growth paths, there remains a considerable degree of imprecision in much of the literature and contested definitions. As Felipe and Lim (2005, pp. 6–7) have noted, "while the growth and development literatures do consider export-led growth, the so-called domestic demand-led growth strategy is not a term defined and used... Therefore it is not straightforward to place the 'debate' between export and domestic demand-led strategies in a theoretical context".

While they rightly point out that the term 'domestic demand-led strategy' has not been defined, it should also be noted that the term 'export-led growth', while widely used, is also not straightforward in its interpretation. A distinction can be made here between an export-oriented strategy and export-led growth. The former is applicable to China, as its average export growth rate of approximately 20 per cent per year for the past 20 years and its rising export/GDP share illustrate. It is possible that this has contributed to growth through the dynamic advantages (such as technology transfer and learning) which are often claimed to arise from trade openness.[3]

China's high export growth rate and rising export/GDP ratio are not, in and of themselves, sufficient to conclude that China's growth has been export-led rather than domestic demand-led. Consider two countries: A has a high export growth rate and a rising export/GDP ratio but has balanced trade, whereas country B has a low export growth rate and a stable export/GDP ratio but runs a large trade surplus. It would be incorrect to say, on the basis of this, that country A's growth is export-led whereas country B's is not.

For this reason, one approach to examining how best to characterise a country's growth path is through a growth accounting approach.[4] The purpose of this approach is to decompose the growth of total output into its constituent parts, including net exports, and thereby ascertain the contribution of the different sectors to growth. This enables us to pinpoint which sectors are the most important drivers of economic growth.

There have been a number of applications of this approach to China. Felipe and Lim (2005, pp. 8–9) propose their own definitions of export-led and domestic demand-led growth by using the basic national income identity:

$$\mathrm{GDP} = \mathrm{Cp} + \mathrm{Cg} + \mathrm{I} + (\mathrm{X} - \mathrm{M})$$

where Cp is private consumption; Cg is government consumption; I is investment; X is exports of goods and services; and M is imports of goods and services.

Provided that GDP is increasing, growth can then be classified as domestic demand-led if:

- the domestic demand components (Cp + Cg + I) are increasing and net exports (X – M) are decreasing. In this case, growth is said to be strongly domestic demand-led; or
- the domestic demand components (Cp + Cg + I) are increasing and net exports (X – M) are increasing but the increase in the former is greater than the increase in the latter. In this case, growth is said to be weakly domestic demand-led.

Analogously, export-led growth occurs if:

- the domestic demand components (Cp + Cg + I) are increasing and net exports (X – M) are increasing but the increase in the latter is greater than the increase in the former; or
- the domestic demand components (Cp + Cg + I) are decreasing and net exports (X – M) are increasing.

Based on these definitions, the growth accounting exercise conducted by Felipe and Lim leads them to conclude that between 1973 and 1993 China's growth was strongly domestic demand-led and it became weakly domestic demand-led in the 1993–2003 period as net exports also contributed to GDP growth; at no point was China's growth best characterised as 'export-led'. Export growth was significant throughout the period but net exports only made a contribution to GDP growth in the 1993–2003 period, and then less than the contribution made by domestic demand factors.

A similar methodology is used by Prasad (2009) to examine China's (and other Asian countries') growth path between 2000 and 2008. His results support those of Felipe and Lim and show domestic demand factors played the largest role in output growth and that China's growth path was (weakly) domestic demand-led during this period. He notes (2009, p. 7) that, "despite the popular characterization of China as relying on export-led growth, the direct contribution of net exports to GDP growth has amounted to only 1.1 percentage points per year over the period 2000–08, which is only about one tenth of overall GDP growth. The data... do not look like prima facie evidence of export-led growth among Asian economies in general, or China in particular". If 2009 data are added, when net exports' contribution was −3.7 per cent, the average contribution of net exports to GDP growth for the period falls to 0.7 (National Bureau of Statistics of China 2010a, Tables 2–20).

Both Felipe and Lim's and Prasad's studies also show the importance of investment as the most important contributor to demand-led economic growth in China. This is confirmed using the most recent data with the average contributions to GDP growth over the period 2000–2009 being: investment: 5.2 per cent; consumption (private plus government): 4.5 per cent; and net exports: 0.7 per cent (calculated from National Bureau of Statistics of China 2010a, Tables 2–20; See also Prasad 2009, Table 2; Filipe and Lim 2005, p. 14).

These studies, and the approach they utilise, are valuable for providing some precision to the measurement and classification of growth paths. However, there are some problems with this approach. The definitions, while precise, nevertheless contain a problem in that exports are autonomous but the other components of domestic demand are partly endogenous: C and I may increase as a result of a prior increase in X. Furthermore, I may be induced by export-oriented policies. That is, I may be a result of export orientation independent of this orientation's responsibility for net exports. This point is made by Dew *et al.* (2011, p. 51), who argue that "in terms of contribution to GDP growth, net trade has made relatively small... contributions over the past decade... [However] strong investment, in part, reflects the promotion of exports which are more capital-intensive".[5] How large a part is not easy to determine in the absence of measures of investment by domestic and exporting firms. Thus, while the growth accounting approach casts serious doubt on the classification of the Chinese economy as experiencing export-led growth, the need to disaggregate further, and to consider indirect effects, means that it is best regarded as an unsettled question at present.

Turning to the share of private consumption in GDP, this – as noted in the introduction to this paper – has been declining despite a decade in which raising its importance in the economy and its contribution to growth has been a central aim of government policy. How can this unintended outcome be explained? Lardy (2007, pp. 1–24) attributes much of this to the relatively small size of government policies aimed at shifting the growth path. His analysis, written before the major stimulus package was implemented in 2008, argued that "at least through early 2007 China's policy initiatives have been relatively modest" (Lardy 2007, p. 1). In particular he argued that the tax burden on rural residents had been reduced "only slightly", that income tax cuts for urban wage residents were "too modest", and that while social services provision was significant it had yet to lead a reduction in households' precautionary demand for savings. He advocated more vigorous government policy action, especially allowing the exchange rate to appreciate and taxing corporate savings, to shift the economy away from exports and investment and towards consumption (Lardy 2007, p. 22).

Prasad (2009) concentrates primarily on savings behaviour. For the household sector, the percentage of disposable of income saved increased to 27 per cent in 2008 (from less than 15 per cent in 1990) thereby dampening any consumption boost derived from increasing incomes. His analysis shows that in China, contrary to standard life-cycle analysis, there is a U-shaped savings pattern with young households and those nearing retirement saving the greatest proportions of their income. Prasad explains this result by the need to save for education and health expenditures in the two age brackets. The policy implication is that if China wishes to switch to a more consumption-based growth path then government expenditures on sectors such as education and health will need to increase and financial markets will need to develop to allow greater borrowing by individuals to smooth consumption spending.

Are these policies likely to be capable of shifting China on to a sustainable consumption-led growth path? The growth accounting approach provides no answer here and assumes that a country can easily switch between growth paths given the right policy mix. To go further, it is helpful to consider post-Keynesian growth theory – one of the few growth theory approaches to take seriously the role of demand, to classify growth paths and to assess the possibilities for switching between them. The main analytical categories are not export- and demand-led growth, however, but wage- and profit-led growth. It is to these models, and their implications for China, that I now turn.

Post-Keynesian growth theory

Growth theory in the post-Keynesian tradition is primarily concerned with the implications of income distribution for economic growth. In particular, it classifies countries growth paths according to whether an increase in the share of wages or profits will lead to sustainable growth.[6] Of course, other causes of growth are acknowledged but the focus is on income distribution.

This framework is useful for consideration here since any attempt to change China's growth path to a consumption-led growth path will require a redistribution of income from profits to wages. As Lee (2011, p. 2) writes, "demand in actual economies could be either wage led or profit led, because consumption is usually thought of as being wage led while investment and net exports are expected to be profit led". The growth accounting approach discussed above uses the distinction between (domestic) demand-led growth (in which consumption and investment are the main drivers) and export-led growth (in which net exports play the most important role). Post-Keynesian models make a different distinction: between wage-led growth (in which consumption plays the most important role) and profit-led growth (in which investment and/or net exports play the key roles).[7]

For our purposes, the analytical question becomes whether China is a wage-led economic regime, in which consumption plays the major role in enabling sustainable growth and, if it is not, whether wage-led policies can move it in that direction.

Whether an economy is a wage- or a profit-led regime is "not a choice variable for economic policy in any straightforward sense" (Lavoie and Stockhammer 2011, p. 7). A wage-led regime is one in which a change in the distribution of income towards wages will lead to sustainable growth; a profit-led regime is one in which it will not.

Establishing whether an economy is a wage- or a profit-led regime depends on the structure of the economy. That is,

> [it depends] in part on the existing income distribution in the country, but also on various behavioural components, such as the propensity to consume of various income recipients, on the sensitivity of entrepreneurs to changes in sales or in profit margins, and on the sensitivity of exporters and importers to changes in costs, foreign exchange values, and changes in foreign demand, as well as the size of the various components of aggregate demand – consumption, investment, government expenditures and net exports (Lavoie and Stockhammer 2011, p. 7).

In a wage-led regime, an increase in the share of national income going to wages would boost aggregate demand and growth through the following mechanisms. First, consumption will increase as wage earners' propensity to consume is greater than the propensity to consume out of profits and thus aggregate consumption increases with income redistribution towards wage earners. Second, through the accelerator principle, the increase in consumer spending will increase investment. (This effect may be reduced if investment also depends on the profit share.) In this case, with both consumption and investment responding positively to an increase in the wage share, the economy is said to be a wage-led demand regime and a wage-led investment regime. This is the strongest case and, since investment increases, extends into increasing long-term growth. The discussion has so far considered domestic demand-led regimes. We can now introduce an open economy by adding the impact of net exports on growth. If an increase in the wage share – and in the real wage – has only a small negative effect on exports, then the economy is likely to be wage-led overall. Of course, if the opposite holds for the relationships described above (e.g., if consumption and investment do not respond positively to an increase in the wage share and an increase in the latter has a large negative effect on exports), then the economy is profit-led; attempts to shift the distribution of income in favour of labour and consumption will not increase long run growth.

The structural differences between wage- and profit-led demand regimes are summarised by Lavoie and Stockhammer (2011, p. 17) and presented in Table 2.

Whether an economy is a wage- or a profit-led regime therefore depends on the size of key behavioural variables. However, as well as these *regimes*, there are also wage- and profit-led *policies*. These are, as their names imply, policy variables and may operate to shift the income distribution in favour of capital (through labour market deregulation and the weakening of trade unions, for example) or in favour of labour (through increased social protection and increases in workers' rights, for example). The distinction between regimes and policies is important because only if both are in alignment will the outcome be increased growth; that is, if wage-led policies are introduced in wage-led demand regimes then the outcome will be better economic growth outcomes. If wage-led policies are introduced in profit-led regimes, however, the result will be economic stagnation. The analogous result holds for profit-led policies.

How does China fit in this schema? Here Lavoie and Stockhammer make the following general argument and incorporate China into it. They argue that many countries have experienced low growth over the past three decades as a result of introducing the pro-capital profit-led policies associated with neoliberalism into wage-led demand regimes. The stagnation of the world economy, relative to the post-war 'Golden Age' in which pro-labour wage-led policies were dominant, is thereby explained. How was growth possible at all in these circumstances? Here they argue that neoliberalism in practice has had to rely on other external factors to compensate for the lack of domestic demand. In some countries these factors have been finance-led growth while in others it has been export-led growth. This leads them to present a "stylized classification"

Table 2. Economic structure: wage- and profit-led demand regimes.

Profit-led	Wage-led
Small differences in propensity to consume	Propensity to consume out of wages is much higher than propensity out of profits
Investment is highly sensitive to profitability and accelerator parameter is low	Investment is not sensitive to profitability and accelerator parameter is high
Very open economy with high net export price elasticity	Relatively closed economy with low net export price elasticity

(p. 25) of important countries' growth models under neoliberalism in practice; China appears as the (sole) representative of an 'export-led' economy located in the periphery. China then, along with Germany and Japan from the core, is identified as an economy in which "increasing trade surpluses have been the growth engine" (p. 27). Elsewhere (p. 4), they define export-led growth as occurring "where the main engine of growth has been net exports" (examples are Germany, Japan and China).

Does China fit the stylised classification as presented by Lavioe and Stockhammer? There are some reasons for doubt. First, China's growth has not been driven mainly by net exports, as the results from the growth accounting approach discussed above showed. Net exports have been contributors to growth in the most recent period but they have not been the "main engine of growth". Domestic investment holds that particular title. Second, the temporal account used to analyse OECD growth records does not straightforwardly, if at all, carry over to China's case. To recap, their argument is that in the Golden Age, the growth in OECD countries as a whole was higher because demand was wage-led and pro-labour policies were followed; growth has fallen subsequently in the period of neoliberalism as pro-capital polices were introduced, and has occurred at all only because of finance- or export-led policies being adopted. In China, the pre-reform period was unlikely to have been wage-led given the general low levels of per capita income, but instead heavily reliant on domestic investment as the source of growth. In the reform period this has continued to be the same main source of demand but growth has increased substantially during this period with net exports contributing to that since around 2000. This trajectory is quite different from the OECD history.

Nevertheless, given the dominance of domestic investment in China's growth history, does this still make China analytically a profit-led demand regime? Here, recall that this regime is characterised by an economic structure in which the propensities to consume out of profits and out of wages are not too different from each other, investment is highly sensitive to profitability and the economy is very open, with a high net export price elasticity.[8]

Considering each of these variables in turn, China's propensity to consume out of profits and wages can be approximated by the savings behaviour of the corporate and household sectors. Both sectors exhibit high savings rates. Knight and Wang (2011, p. 12) estimate that the enterprise saving rate out of profits between 1996 and 2008 was "consistently high, but varying between 60 and 80 per cent".[9] In the household sector, as already noted, Prasad (2009, p. 18) reports that household savings, as a percentage of disposable income, "has been on a gradual upward trend since 1990, rising to about 27 per cent in 2008". The comparable data for 2008 for the EU27, Japan and the USA were 5.4, 2.3 and 4.2 per cent, respectively (OECD 2011, p. 63).

In terms of the sensitivity of investment to profitability, this is likely to vary substantially among industrial ownership categories. As a general rule, the private (non-state) sector is much more likely to be sensitive to profitability than the state-owned sector. The state sector still continues to operate with varying degrees of a soft budget constraint, is prone to excess capacity and unsold goods and growth (rather than profitability) continues to be a strong managerial objective. The non-state sector, consisting of domestic private and foreign funded enterprises, is characterised by competitive markets where the profit motive dominates and where investment might be expected to be highly sensitive to profitability.

To move beyond this generalisation is complicated, however, because the ownership structure of Chinese industry now includes shareholding and limited liability companies, which may be in the state or the private sector. The industrial ownership structure, using some broad categories, is presented below in Table 3. Since we are interested in the sensitivity of investment to profitability, the table weights firms in each category by their share of the value of total industrial assets (which is likely to be a more accurate proxy for their investment share than their share of either total output or of total enterprises).

Table 3. Shares of total assets of industrial enterprises by ownership type, 2009.

Type of enterprise	Share of total industrial assets (%)
Domestic funded	
State-owned enterprises	13.9
Collectives	1.0
Cooperatives	0.5
Joint ownership	0.3
Limited liability corporations	
State sole funded corporations	7.9
Other limited liability corporations	20.5
Shareholding corporations	11.8
Private Enterprises	
Private funded	2.5
Private partnerships	0.4
Private limited liability	14.3
Private shareholding	1.3
Enterprises with funds from Hong Kong, Macau and Taiwan	9.0
Foreign funded enterprises	
Joint ventures	7.5
Cooperation enterprises	0.4
Enterprises with sole funds	7.4
Shareholding	0.8

Source: Calculated from *China Statistical Yearbook 2010*, Table 14–1 (National Bureau of Statistics China 2010a).

Table 3 illustrates the complex ownership structure of industry in China today. The 'pure' state-owned sector accounts for nearly 14 per cent of total assets while the 'pure' private sector, domestic and foreign, accounts for about 30 per cent.[10] In between are various hybrids involving joint ventures between foreign firms and domestic (predominantly state-owned) enterprises as well as limited liability and shareholding enterprises formed by various state entities. As a rough guide, we can say that about 55 per cent of China's industrial assets are controlled by state or quasi-state enterprises (the first seven rows of figures in the right-hand column of the table) while 45 per cent are in the private sector (the remaining nine rows). This is only a first approximation but sufficient for our general purpose here.

China's trade/GDP ratio, a common measure of trade openness, at 55.4 per cent is relatively high for a large country. It is comparable to that of the UK (58.8%) and France (53.0%) and considerably higher than that of India (47.7%), Japan (30.8%) and the USA (27.7%), although still lower than that of Germany (85.3%). (All figures are averages for 2008–2010. See WTO 2011.) Estimates of China's export price elasticity vary but recent work indicates a significant price elasticity. For example, Ahmed (2009) reports that:

> movements in the exchange rate substantially affect export growth in the direction predicted by theory; that is a greater exchange rate appreciation dampens export growth, and our estimated price elasticity is generally greater than unity, and towards the high end of price elasticities found in previous work.

My assessment of these variables, again in the form of 'stylized facts' but drawing on empirical estimates, is summarised in Table 4. I divide the variables into those exhibiting values consistent with a wage-led demand regime and those consistent with a profit-led demand regime.

Two of the three key economic variables are more consistent with the characterisation of the economy as being a profit-led regime and one is more ambiguous. Of course, the effect on the whole economy depends on the balance of all three but, as a first approximation, it may be

Table 4. The stylized facts of China's economic structure.

Variable	Profit-led regime	Wage-led regime
Propensity to consume out of profits and wages	Propensity to consume out of wages and profits both relatively low	
Sensitivity of investment to profitability	High sensitivity to profitability in the private sector accounting for around 45 per cent of industrial assets	Low sensitivity to profitability in the state and quasi-state sector accounting for around 55 per cent of industrial assets
Openness of economy and export price elasticity	Trade/GDP ratio of 55 per cent is relatively high for a large country. Exports face high price elasticity	

reasonable to characterise the Chinese economy as being a profit-led regime or, less strongly, not clearly demand-led. The implications of this are discussed in the concluding section of this paper.

Implications and conclusions

China's policy objective for the past decade has been to change its growth path. By considering the growth accounting approach we can characterise the current growth path as one that is domestic demand-led with domestic investment being the dominant growth engine. Net exports have played a contributing role to total growth in the 2000s but this does not negate the above characterisation of the economy as predominantly domestic demand-led. Nevertheless, while this conclusion is clear from the growth accounting approach, and is an improvement in terms of definitional precision, it has some problems itself which suggest that more disaggregated work on investment would be warranted. At any rate, the approach is sufficient to show that the usual classification of China as an export-led growth economy is problematic and remains an unsettled question.

The application of post-Keynesian growth theory illustrated that, within the demand-led model the structural characteristics of the Chinese economy make it more likely to be a profit-led than a wage-led regime. This has implications for the prospects of introducing policies capable of shifting the growth path.

The measures contained in China's Five Year Plans outlined in the second section of this paper include pro-labour redistribution policies aimed at increasing wages. To these we can add other initiatives such as the central government's announcement (on 30 June 2011) that the income tax threshold would rise from 2000 to 3500 RMB per month, effective 1 September. Also relevant are changes to the bargaining power of labour (through the implementation of the new Contract Labour Law in 2008, for example) which is important in name although relatively modest in effect. Rising wages, which are occurring anyway as a result of labour market dynamics, are also noteworthy for their potential redistributive effects; according to official figures real wages have increased by over 10 per cent each year during 1998–2009 (National Bureau of Statistics of China 2010b, Tables 1–26 and 1–27). All of these policies are highly desirable on equity grounds. However, these pro-labour policies and market-led wage increases are not necessarily consistent with the leadership's growth objective. Post-Keynesian approaches highlight the problems in introducing wage-led policies into profit-led regimes. The result is likely to be lower growth and incoherence rather than a smooth transition to a new sustainable growth path.

The central leadership has prioritised growth and explicitly argued that China must achieve at least an 8 per cent annual growth rate to absorb new labour market entrants and labour transferred into the industrial sector and thereby maintain social stability. But, as noted, introducing pro-labour policies in a profit-led regime may reduce growth and put growth and redistribution on a collision course.

What is needed, therefore, are policies to address the structural characteristics of the Chinese economy as summarised in Table 4. Social protection policies which lower insecurity, and thereby increase the propensity to consume out of wages, constitute one obvious area and one in which some policies (such as health and pension provisions) have indeed been introduced. Similarly, technological upgrading to decrease the price sensitivity of exports is also beneficial and has been a policy objective. If China is to succeed in redistributing income and maintaining its high economic growth rates then these structural changes will be needed as the basis for a different growth path. In this paper, operating at the level of 'stylized facts', I have argued that China is more likely to be a profit-led regime at present; this is clearly an area where more empirical work is needed. Settling whether China is a wage- or profit-led regime has critical implications for China and beyond.

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Notes

1. For comparative purposes, in Japan the share of consumption in GDP is 55 per cent and it is 71 per cent in the USA.
2. The measures discussed above are all central level policies. There are also complementary policies being adopted at the provincial level. For example, the Jiangsu provincial government has recently stated its objective as being to double the average wage level in the province by 2017. I am grateful to Hu Guoliang for bringing this point to my attention.
3. This is, in fact, a controversial claim. See, for example, Yanikkaya (2003). These dynamic aspects, which might best be described as constituting 'trade-led growth', are not considered further in this paper.
4. 'Growth accounting' has also been used to distinguish between intensive and extensive growth paths. This is not the sense in which the term is used here.
5. This point was also made by an anonymous reviewer, who also suggests that employment figures (at the margin) and corporate asset distribution by sector be examined. However, unfortunately no aggregate data exist for China for these variables.
6. Post-Keynesian models consider both demand and supply side effects. We restrict our attention here to the demand side factors. For a review of these models see, for example, Setterfield (2002).
7. Strictly speaking this distinction is true for the Kaleckian version of post-Keynesian growth theory. Kaldorian models are based on internal and external demand distinctions. The subsequent analysis is based on the Kaleckian version.
8. Kaldorian models would also add the size of GDP components to this list.
9. One reason for this is that investment has increasingly been financed by enterprise savings. For example, the percentage of fixed asset investment financed by retained earnings increased from 55.4 per cent in 1981 to 77.4 per cent in 2009. See National Bureau of Statistics of China 2010a, Table 5-4.

10. This is calculated by adding the domestic private sector to the solely foreign and Hong Kong, Macau and Taiwan funded enterprises. (This latter disaggregation is not given in Table 3.)

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