Growth, Distribution and Foreign Trade: Is Mercantilism Passé?*

Xiao Jiang[†]   Sohrab Behdad [‡]

Abstract

The development of international trade theories has turned mercantilism into an obsolete boutique that appears in the beginning of almost every international trade textbook. Students are seldom reminded that mercantilists were the first group of people who were concerned about an inherent contradiction in capitalism, micro level wage-suppression that leads to macro level sluggish aggregate demand. According to mercantilists, export market is a solution to this contradiction. In this paper, we argue that in todays world, mercantilism is not passé even if it is not what it once was. In the name of export-led growth, the mercantilist system is still effective in suppressing wage share around the globe, and making the wage-led growth regime more and more difficult to attain. In this paper we formally illustrate this argument by using a Post-Keynesian trade-focused model. Furthermore, using China as an example, we explicate the challenges countries might be facing while trying to break out from the mercantilist growth path, and some possible strategies to face these challenges.

1   Introduction

In 1776, Adam Smith declared the "the mercantile system" a fallacious approach to attain wealth for a nation by pointing out, in the beginning sentence of *The Wealth of Nations*, "The annual labour of every nation is the fund which originally supplies it with all the necessaries and convenience of life ." He, then, declared that mercantilists fervor for accumulating treasures (gold and silver) as a mistake in taking money for wealth, and ridiculed them for their "sophistical" argument. Furthermore, Smith viewed mercantilists protectionist zeal for

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having an export surplus (favorable trade balance) to accumulate "treasures," a misdirected policy advancing their special monopolistic interests, harming the overall benefit of the nation. Thus, Smith promoted the *laissez faire* system, using the term already coined by the Physiocrats, the enemy of mercantilism in France[1].

Soon after, Ricardian theory of comparative advantage convinced any remaining unbelievers that England would indeed gain from free trade, by specializing in export of the very same industrial products that had gained world prominence through the same protective policies of the mercantile system. Ever since, as it comes in Joan Robinsons *mea culpa* (1966, 3), "the universal benefits of free trade" has been "imposed upon" any "young mind" who enters "the fraternity of economists." Robinson echos the confession of her teacher, John Maynard Keynes, who admits to the "inadequacy of the theoretical foundation of the laissez-faire doctrine upon which I was brought up and which for many years I taught." (1936, 339).

Nevertheless, the dogma has remained strong. Albeit, abandoning of the gold standard, has left no reason for accumulation of treasures any more. Instead, national central banks have gained control over the management of the money supply and interest rates, and manipulation of foreign exchange rates ("managed" float). Yet, "favorable trade balance" still remains a blasphemous mantra irritating the guardians of the "temple of free trade."

In this paper, we will argue that in their nationalist concern for the wealth of nation, mercantilists central themes of accumulation of treasures and favorable balance payment were not fallacious and misguided. Rather, in their context, their views reflect insightful and astute reactions to, and reflections of, certain complexities and contradictions of the rapidly developing capitalist economy emerging out of the womb of a decentralized feudalistic economic system, within an emerging nation-state, struggling for its survival in a competitive and hostile world system.[2] Moreover, as market capitalism has evolved and expanded in the past decades, the contemporary world system has become even more competitive and hostile, especially towards developing countries. In the name of export-led growth, the mercantilist approach has evolved into an effective way of suppressing wage share around the globe, and eventually has made the wage-led growth regime more and more difficult to attain.

This paper is divided into 5 sections. Section 2 unconventionally positions mercantilism in the tradition of economic thoughts concerning macroeconomic

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[1]The criticism of "the mercantile system" was first initiated by Physiocrats in their attack on the heavy handed protectionist regime of J.B. Colbert, finance minister of Louis XIV, in *Philosophie rurale*, published anonymously in 1763, presumably written by Mirabeau, Quesnay, and possibly Charles Richard de Butr. They proposed *Laissez Faire, Laissez Passer* as the *modus operandi* for their preferred economic policy. (Sabbgh 2015).

[2]Wallerstein (1980)

development policy; and argues that the mercantilism is ultimately a policy tool invented to resolve the Keynesian effective demand problem with a repressed wage regime. Section 3 sketches a simple one-sector open macroeconomic model based on which our simulation exercise will focus on. Section 4 illustrates three sets of simulation results: 1. consumption-led growth with declining profit share; 2. Mercantilist trade-led growth as a solution to declining profit share; 3. The attempt of Wage-led growth in the mercantilist regime.

2 Mercantilism and the Effective Demand Problem

2.1 Mercantilism and the Wealth of the Nation

Mercantilism is referred to the collection of the eclectic and unsystematic body of thought presented by a group of authors, many as pamphleteers and essayists,[3] between the 16th to 18th centuries, in Western Europe, mainly England, France, Netherlands and Germany.[4] The central theme of this literature is an expression of concern for the wellbeing of a national economy (thus, "the wealth of the nation") in the early development of capitalism, within the new nation-states. These nation-states were deeply engaged in fortifying their newly establish sovereign territories by unifying the feudal regions and mercantile cities within a unified national market and in competition with their rival nation-states. The mercantilist literature is, therefore, mainly policy oriented and relies on analytical reasoning only to the extent deemed necessary for convincing the reader, within limits of experience and knowledge of the author. Naturally, those engaged in this discourse were by a majority those involved in commerce, private or state finance, or colonial affairs, and nearly always with a direct interest in the policy they promoted. As it is expected, in the course of the three-century span of mercantilism, economic development and nation-state consolidation affected policy concerns, and the economic policy discourse became more articulated. This "paved the way to a theory of economics, (and) more and more, and almost in spite of themselves, (they did) work out theories of the relation between causes and effects in economic field."(Heckscher, 1969, 21).

Take the matter of accumulation of treasures. Obviously, the desire for holding gold (precious metals) was a certain vestige of feudal ages, or even the earlier past. But there was more to it. The supply of money gained significance in the well-being of a market economy, where, production was no longer for consump-

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[3]A rich collection of works of British mercantilist pamphleteers and essayists is reprinted in 4 volumes of Magnusson (2008).

[4]As an economic system, mercantilism is referred to the early development of capitalism at the decline of feudalism roughly from 13th and 14th century, to domination laissez faire capitalism in the late 18th and early 19th century.

tion (use value) but for exchange (exchange value), and when profit of capitalists (merchants) is realized only when the commodity in their possession is sold in the market. (Cunningham, 1907, 8 and Roll, 1987, 64) This link between the "micro" world of the capitalist production, and the "macro" sphere of capitalist market valorization was missed by Classical economists, particularly Smith and Ricardo.[5]

We know now that in a growing economy there is need for a growing money supply, to prevent interest rate from rising, thus, limiting the rate of investment. In an economy where the money is gold, or backed by gold, the accumulated amount of gold in the economy determines the money supply. Gerard Malynes (d. 1641) wrote: "For if Money be wanting, Traffic dot decrease, although commodities be abundant and good cheap." (Heckscher, 1934, II, 217) That is a quite an accurate expression of a deflationary state when in a growing economy money supply remains constant, and even worse, if decreasing.

This is in fact what the open economies experienced for as long as the gold standard remained in effect. The "specie flow mechanism" determined expansion and contraction of these economies. The tie between external balance and internal balance through the gold standard began to be rejected by giving central banks a more free hand in determining their countrys money supply, and eventually delinking money supply and any gold backing in the internal trade by the outbreak of the WWI. The gold-exchange standard (Bretton Woods Agreement of 1944, in which U.S. dollar was pegged to gold and other currencies were pegged to U.S. dollar) also collapsed in the early 1970s, when all major currencies became afloat, because the U.S. balance of payments deficit. With fiat currencies and floating exchange rates, gold has become totally irrelevant in modern capitalism.

J.M. Keynes, praises the mercantilists in the chapter that he dedicates to mercantilism in his *General Theory* that "[the] early pioneers of economic thinking may have hit upon their maxims of practical wisdom without having had much cognizance of the underlying theoretical grounds."(1936, 340) Although having a "favorable balance of trade" was instrumental for maintaining a growing money supply for a growing economy, the most important consideration for mercantilists, according to Eli Heckscher, was their "fear of goods," and "[e]xport was to a very large extend an end per se." That is, " selling was an end in itself. The object was, in fact, to dispose of goods by any possible means." (1934, II 118)

To appreciate mercantilist's views, we need to realize that the mercantilism was not the economic concern of just a group of merchants, but the economic

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[5]Only Malthus in his theory of gluts made an attempt in showing the frequent insufficiency of aggregate demand causing economic crises. "For, since Malthus was unable to explain clearly how and why effective demand could be deficient Ricardo conquered England as completely as the Holy Inquisition conquered Spain." (Keynes 1936, 32)

policy of an emerging capitalist economy pursuing a relatively rapid[6] process of industrial development within the nation-state. In fact, according to Heckscher (1934, II 137), "it is tempting to assume that the interests of merchants and consumers [laborers?] were made subservient to the interests of the producers [manufacturers?]." As early as in 1572, imports of manufactured goods were banned in France "so that the people of France 'can better devote themselves to the manufacture and working up of wool, flax, hemp and tow and get the profit that the foreigners now make.'" (Wilson, 1958, 22) This is nothing less than what became known as "import substitution industrialization" in the more contemporary times. And, J.B. Colbert, Finance Minister (1665-1683) of Louis XIV, believed that "manufactures were the true source of wealth and social contentment." (Wilson, 1958, 22) The efforts toward industrialization of the emerging capitalist nations of the Western Europe are reflected in several studies.[7] The Industrial Revolution in the mid-18th century in England, which gave rise to the idea of *laissez faire* economic policy suggested by Smith and Ricardo, was the blooming outcome of the capitalist development policy in the mercantilist period.

2.2 Wage Repression and the Problem of Effective Demand, Or "Fear of Goods"

But why fear of goods was such a grave concern of mercantilists? In the production process, industrial inputs and labor are the main elements of cost. To keep the cost of production down, mercantilists forbid the export of many domestically produced raw material needed for industrial production (e.g., wool needed for textile in England), and promoted import of cheap raw material from colonies. However, labor was the most significant cost of production, especially with the low level of mechanization in the pre-industrial revolution period. Even as of today, labor cost takes more than 80% of total cost of production in USA. (Taylor, 2008) Thus, keeping the labor cost low was the key to a profitable production process, while maintaining a competitive position for any capitalist. It is notable that maintaining low labor cost was the central element of any industrial policy in the mercantilist system.

Edgar Furniss (1905) study of the position of labor in England between 1660 and 1775, reflects that the prevalent policy principles about labor was the following: First, the wealth of a nation depends on the size of its population if usefully employed. William Temple writes in *Essays on Trade and Commerce* (1770) "That the riches and strength of a state consist in the number of its inhabitants, and more especially of its laboring people, provided they are prop-

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[6]Compared to the very slow changing, and almost static state of affairs in a millennium of feudalism in Western Europe.

[7]Most distinguished among them William Cunninghams three-volume study of The Growth of English Industry and Commerce (vol. 2, 1907). See also Cole (1939 and 1943,) on mercantilism in France (before and after Colbert), and Ormrod (2008) on Netherlands and England.

erly employed, is a truth never yet controverted." (Furniss, 1905, 97). The concern was having a large population relative the vastness of the economy, or as William Petty called "full peopling," measured by the ratio of hands to land. Otherwise "fewness of people, is real poverty." (McCormick 2014, 33)

Moreover, the population must be employed properly, by making an effort in implementing necessary regulations and establishing proper institutions and agencies so that the population becomes active and productive. These efforts would be complemented by "repression of willful idleness by corrective and punitive legislation." (Johnson 1932, 702) Idleness could be "punished by death or transportation [exiled to the colonies]; because idleness brings, 'want, death, disease, and thins a nation.'" (Johnson 1932, 703). Not only idleness of adults was "an unforgivable sin," deserving punishment, "in the mercantilist view, no child was too young [even from four or five] to go into industry."[8] (Heckscher, 1934 II, 155)

Second, as an effective way of keeping the population properly employed, the laboring population must be kept poor. Arthur Young, a widely published author in ways of life in England, writes in his *Eastern Tour* (1771) "Everyone but an idiot knows that the lower classes must be kept poor or they will never be industrious." John Weyland, in his Observations on Mr. Whitbreads Poor Bill (1807) also notes "The lowest orders should endure a state bordering on want in order that a necessity may exist for their labor." Young and Weyland are only echoing Thomas Mun's belief that "penury and want do make a people wise and industrious" in his England's Treasures by Foreign Trade (1664) and Bernard Mandeville in his *Fable of the Bees* (1714) that "the great number of workers must be poor for a society to be happy." (All quoted in Furniss, 1905, 117-118). Thus, one can conclude that mercantilists sought wealth for the nation, "from which the majority of the people must be excluded." Thus the mass of the population, the laborer, would become "the beast of burden for the few; not only *de facto* but deliberately and with set purpose."[9] (Heckscher 1934 II, 166)

While the laboring class "bordering on want" to make profits high, the demand for products of their labor could not be growing as rapidly as capital would be accumulated and output grew. Hence the capitalist contradiction between high profit and low wages would be manifested in valorization of stock of goods in the domestic market. Consequently, the external market (export) remains as the true "vent for surplus," to use Adam Smith's term, which he used without

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[8]Early marriage and high fertility were praised and rewarded. A law of 1666, in France provided tax exemptions, or pension for the father of a family with ten or twelve children, of whom none were to be priest, monk or nun. (Heckscher 1934 II, 160)

[9]It is note worthy that there was an opposition to education of the masses, for, as Mandeville alerts his readers "To make the Society happy and People easy under the meanest Circumstances, it is requisite that great Numbers of them should be Ignorant as well as Poor." (Heckscher 1934 II, 167)

realizing the depressive economic effect of existence of a surplus on the economy.

In this way, a favorable trade balance would become a means for continued growth of a low-wage economy. This, of course, brings about a fallacy of composition. Not all trading economies can have an export surplus, as one country's export surplus is another country's import surplus. It is a zero sum game. No wonder there were, continually, trade wars between the countries pursuing a mercantilist strategy of economic growth. (Conybeare 1987) *The Dictionary of Trade and Commerce* (1767) puts it succinctly: "There seems to be but a limited quantity of Trade in Europe. Suppose that in the trade of the woollen manufacture England is in the channel of exporting and supplying to the value of fifteen millions; if it should in any year supply twenty millions, it must be at the expense and diminution of sales of others." (Huberman 1936, 135) It is not all that illogical that mercantilist viewed the sum total of wealth in the world constant, and wealth could be acquired only through international trade by selling more than you buy, protecting their national market from intruders, while they intruded in the national market of others. Trade protectionism was the only way of maintaining a growing aggregate demand in a low-wage labor economy.

2.3   Is Mercantilism Passé?

Obviously, the mercantilist nationalist-colonial economic growth strategy could not have been a path to global economic growth. It would be, and it was, a perpetual state of trade wars. The chaotic competitive trade protectionism and currency manipulation in the grave condition of the Great Depression, brought the advance capitalists countries to pledge to a new deal in accepting free trade as the working principle of international trade. The first attempt for multilateral negotiation for tariff reduction failed in the formation of Havana Charter (1947) of International Trade Organization (ITO). Then General Agreement on Tariff and Trade (GATT-1947), which evolved into the World Trade Organization (WTO) in 1995, became the conduit for rounds of multilateral tariff reduction negotiations. (Bossche, 2008)

However, Joan Robinson warned:

We know now that free trade is not an equilibrium state that would be reached if each country individually followed its own enlightened self-interest. It could be achieved only by mutually accepted self-denying ordinances, establishing a code of behavior that would be good for all if each observed it. (1966, 8)

But Robinson adds, since sagging aggregate demand is a recurrent problem of industrial enterprises, the effort to increases the share of the nation-state in world trade is an integral part of economic policy of every government. This is

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what will shape, she asserts, the "new mercantilism". (1966, 10)

The process of internationalization of capital (Hymer 1973) has added new complexities to promotion of the national economic prosperity. Multinational Corporations (MNC), seeking low wage labor, cheaper resources, access to protected foreign markets, and less regulatory limitations or lower taxes, have accelerated expansion of their global network since the middle of the 20th century. Within this global network, national capital has become internationalized in its production circuit. (Palloix 1973) Through its vast global supply chain, capital produces abroad what it used to export to abroad. In this way, internationalized capital has established export platforms and facilitated export-led growth in developing countries, all of which were the unfulfilled wishes of the developing countries who sought a rapid rate of industrialization but lacked capital and advanced technological knowhow. The expansion of the global supply chain, has unavoidably affected the structure of production and employment in the previously-exporting countries. In fact, these advanced industrial countries have became importers of the industrial products of their own industrial enterprises (and their foreign affiliates) from their global supply chain. This "outsourcing" is the process that has lead 1) to decline of manufacturing production ("rust belts") and employment in "advanced" industrial (previously exporting) countries., and 2) to highly dependent rate of economic growth in the low wage "industrializing" countries on the growing aggregate demand of the economies of their export destination.

3   Growth, Distribution and Trade: A Modeling Exercise

Our reading of mercantilist literature reveals that the mercantilists understood a complex relationship between growth (the wealth of the nation), distribution and trade in the light of economic policies, and such relationship is still (if not more) relevant today. This section intends to formally explore such relationship by conducting a simple modeling exercise with wage, profit, trade and growth (along with other key macroeconomic variables) clearly modeled and specified. As we will soon see that such modeling exercise will not only clarify some of the mercantilist arguments in formal terms, but will also present new insights about the mercantilist approach to economic growth. Most importantly, in our model we can appreciate the difficulties associated with rebalancing from trade-led growth.

This is an one-sector macroeconomic model rooted in Post-Keynesian/Structuralist tradition. Similar to most Post-Keynesian models, our model allows for the existence of under-utilization of productive capacity (unemployment) and mark-up pricing, which we believe is more inline with both the reality of most of today's export-oriented developing countries and the Mercantilist conceptualization of

the economy. However, this model deviates from the typical Post-Keynesian model in the way that it accounts for imported intermediate inputs explicitly and it has the unique feature of firms marking up price over wage, profit and imported intermediates, which as we will see makes the determination of income distribution endogenous in this model.[10] Below is an elaboration of this model.

This is a demand-driven model with output determined by aggregate demand as below.

$$X = C + I + G + E \tag{1}$$

In the equation (1), C, I, G and E are consumption, investment, government spending and exports, respectively.

Government spending and investment are assumed to be fixed exogenously following the Keynesian tradition. Exports and imports are modeled after the standard textbook version of trade functions:

$$M = \phi^0 \psi^{-\phi} X = \phi^0 (\frac{\epsilon P^*}{P})^{-\phi} X \tag{2}$$

$$E_i = \chi^0 \psi^\chi X^f = \chi^0 (\frac{\epsilon P^*}{P})^\chi X^f \tag{3}$$

In equations (2) and (3), ϕ and χ are price-elasticity of imports and exports, respectively. ψ is the relative price ratio between foreign to domestic price, P^* is the foreign price, and X^f is the world import demand for the home country's products. Thus, the product of the first two items on the right hand side of equation (3) would give us the home country's share of world export demand.

This model follows the classical saving assumption with capitalist firms consuming nothing and all consumptions coming from wage-earning households. The level of household consumption is the residual of wage-earners' income subtracting income tax and saving.

$$C = \frac{(wL + \sum U_{i,w})(1 - t_l)(1 - s_w)}{P} \tag{4}$$

In here, t_l is income tax rate, s_w is post-tax household saving rate, and w and L are nominal wage rate and employment level, respectively. $\sum U_{i,w}$ is the sum of all other income transfers to wage-earning households.

There exists persistent unemployment (or surplus labor); in other words, labor is supplied horizontally at predetermined wage rate. Total employment in the economy is determined by the ratio of total value-added to labor productivity, that is:

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[10]While there exists other Post-Keynesian models with endogenous income distribution (Tavani et al., 2011, Stockhammer and Michell, 2013; Taylor, 2004), our way of "endogenizing" income distribution has two advantages: 1. it makes the model trade-focused, which is exactly what we need for the present paper; 2. it does not require the measurement of capital stock, thus present model avoids the Cambridge Capital Controversy.

$$L = \frac{V}{\xi} \tag{5}$$

Let us now turn to prices and the distribution of income. Output prices conventionally are determined by the neoclassical marginal productivity principle by assuming perfect competition. However, capitalist firms in Post-Keynesian framework are assumed to be large firms with significant market shares, they produce with excess capacity and enjoy pricing power. In standard Post-Keynesian models, prices are formed by firms marking up over wage and profit; however, in the light of La Marca (2009), the present model has prices marked up over wage, profit, imported intermediates, and production tax[11] as below:

$$P = (1 + \tau)(\frac{wL}{X} + \epsilon P^* m + Pt) \tag{6}$$

Where τ is the mark-up rate, m equals M/X - the propensity to import, and t equals T/PX - the production tax rate.

$$\rho + \omega + \epsilon \frac{P^*}{P} m + t = 1 \tag{7}$$

Equation (7) is the income distribution equation stating that each unit of output produced in this economy has to be distributed four-ways amongst wage (labor), profit (capitalist), imported intermediates (foreigners) and production tax (government). ρ is the profit share, ω is the wage share which equals $(wL)/(PX)$, $\epsilon P^*/Pm$ is the foreign intermediate share (measured in domestic price), and as mentioned earlier, t is the production tax rate.

The international competitiveness of domestic goods depends negatively on domestic wage share and the level of import propensity but positively on the price elasticity of domestic output in the world market η. Similarly, profit share depends negatively on wage share and η, hence:

$$\epsilon \frac{P^*}{P} = \frac{1 - \omega}{m(1 + \frac{1}{\eta})} \tag{8}$$

$$\rho = \frac{1 - \omega}{\eta(1 + \frac{1}{\eta})} \tag{9}$$

Equations (8) and (9) together establishes a stable relationship between imported intermediates share and profit share linked by η:

$$\epsilon \frac{P^*}{P} m = \eta \rho \tag{10}$$

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[11]It can be argued that production tax should be excluded from the mark-up equation because it is paid *ex-post*, but since production tax is an exogenous and passive variable in this model, including it in the mark-up equation would not make much qualitative difference.

Finally, we shall specify the three macroeconomic balances in this model in the three equations below:

$$F = (1 - t_l)(wL + \sum U_{i,w}) + t_k \rho X + tPX - PG + \sum U_{i,g} \qquad (11)$$

$$D = \epsilon P^* M - PE + \sum U_{i,f} \qquad (12)$$

$$PI = s_k(1 - t_k)\rho X + s_w(wL + \sum U_{i,w})(1 - t_l) + F + D + \sum U_{i,fof} \qquad (13)$$

Equation (11) is the public balance (F), which equals to the sum of the three tax incomes (wage tax, business tax, and production tax) minus government spending, plus any other net payment flows to the government. In equation (12), D is the *negative* external balance, which equals to the difference between imports and exports plus any net payment flows to the rest of the world from the home country. Notice an increase of trade deficit will push up D, which we treat as foreign savings. And finally, equation (13) illustrates the macro accounting identity of saving-investment equality. Essentially, any investment have to be provided by savings from capitalist firms, wage-earning households, government, and foreigners, plus any net saving flows that go into the flow of fund account of that country.[12]

In short, this is a Post-Keynesian/Structuralist model with the following special features. 1. It is trade focused, and it treats all the imports from an I/O table (and SAM) as imported intermediate inputs. 2. The firms mark up price over wage, profit, imported intermediates, and production tax. 3. Profit share and imported intermediate share are linked by domestic output-price elasticity in the world market. 4. The model does not depend on the estimation of capital stock K[13], hence it avoids the Capital Controversy along with other difficulties associated with capital stock estimation.

4 Model Closures and Simulation Experiments

The one-sector macroeconomic model introduced above features 11 independent equations, and with 11 unknowns (or endogenous variables), hence the model is just determined, and solvable numerically. However, the decision of which variables are endogenous and which are exogenous depends on the closure rule the modeler chooses to have. In short, closure rule is the underlying causal structure of a model, and its choice is crucial to the simulation results of a model. (Sen, 1963; Taylor and Lysy, 1979; Rattso, 1982; Taylor, 2004) In this

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[12]Equation (13) is not included in model as an independent equation because if the model is calibrated correctly based on a Social Accounting Matrix, equation (13) will alway hold by Walras Law.

[13]Capital income however plays an important role in this model. Conventionally, capital income is rK, but in this model, it is ρX.

section, we will run three sets of simulation based on three different closure rules.
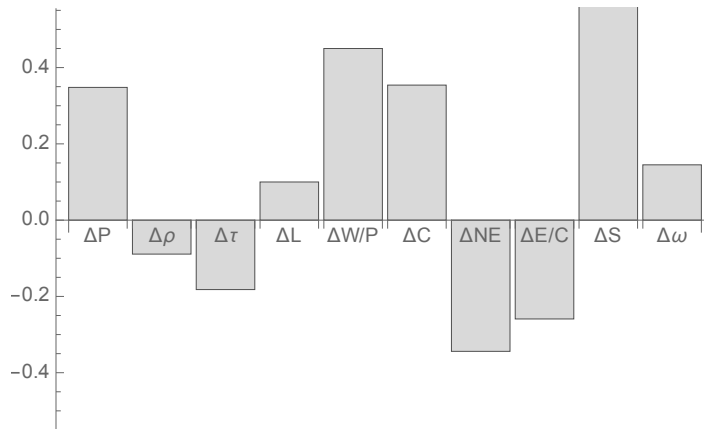
Before diving into each closure, a few words shall be said about model calibration. In order to run simulations, exogenous parameters in this model have to be calibrated by actual data, econometric estimations and sometime assumptions. In this model, most of the parameters are taken directly from China's 2007 Social Account Matrix (SAM). Wage, employment and capital stock data are taken from China Statistical Yearbook (2007) and China Labor Statistical Yearbook (2007). Finally, trade (import and export) price-elasticities are directly taken from the estimates by Imbs and Mejean (2010).

4.1 Closure I: Consumption-led Growth Pure and Simple

We assume an economy such as China has to grow at certain rate (g) in order to absorb enough excess capacity to maintain socio-political stability. As a thought-experiment, we ask a planning question: how would each macroeconomic variable adjust to support such exogenous growth rate? In the first closure, we try answering this question by assuming that export demand is exogenously given and import demand is of a fixed proportion of the country's total outputs. Essentially, this is a scenario when output growth cannot be supported by international trade.

In this closure, the country's total output (X) is exogenously given, and we shock it for 10% in order to observe how would other variables adjust to support such growth. Investment demand is given exogenously following the Keynesian tradition, export demand and government spending are constant too, hence in this extreme case, the growth of output has to be supported by consumption demand only. Wage rate determination is a unique feature of this model. In neoclassical models, wage rate is often endogenously determined by marginal product of labor; whereas in Post-Keynesian/Structuralist models, wage rate is either determined exogenously by sociopolitical conditions or as a subsistence wage, or it is determined endogenously by some well-specified labor market conditions. However, in this closure, wage rate is treated as an endogenous variable that adjusts to support the pre-determined growth rate. Rationale behind this closure lies in the assumption that the economy is semi centrally planned and semi-market-based similar to China. It is assumed that the central government plays an active role in determining the GDP growth rate, and it has access to a set of policy tools to affect some macroeconomic variables (wage being one of them) to achieve the planned growth.

Figure 1: Closure I: Consumption-Led Growth

The bar chart above illustrates the post-shock results of the model. From the left to the right, the variables depict changes either in percentage or level of: aggregative price (level) , profit share (level), mark-up rate (level), employment (in %), real wage (in %), real consumption (in %), net exports (in %), exports-consumption ratio (level), savings (in %), and wage share (level). What figure 1 illustrates is a classic example of wage- and consumption- led growth. With investment, government spending, and export demand held constant, economic growth has to come from an increase in consumption demand, which requires and increase real wage.

To sustain the planned 10% output growth, nominal wage (w) has to increase as shown, and such wage increase results price inflation via equation (6). However, real output growth has to be supported by real consumption (C) growth, on one hand w increase pushes C up via equation (4); but on the other hand, price inflation exerts downward pressure on C. Hence, to ensure that real consumption growth matches the planned output growth, another endogenous variable has to adjust - the distributional parameter ρ - profit share. Mathematically, according to the markup pricing equation, in order counteract the inflationary pressure caused by w increase, the markup rate τ has to adjust downward. The economics behind this is rather subtle. In this model, capitalist firms form value-added price by marking up over wage, profit and cost of imported intermediates. Furthermore the markup rate is linked to profit share by following equation:

$$\tau = \frac{\rho}{\omega + \epsilon \frac{P^*}{P} m + t} \tag{14}$$

Thus, in order to produce sufficient amount of real consumption (C), wage increase has to be accompanied with the contraction of profit share, so that capitalist firms have less ability to markup over wage cost; the result is the

redistribution of income from capitalist firms to workers as it is shown by the decline of profit share (ρ) and the rise of wage share (ω) in figure 1. In reality this has to be associated with either increased negotiation power of workers, or effective policies that redistribute value-added from profit to wage. As the economy grows, import demand grows proportionally with total output, but export demand is fixed exogenously, so net exports decline, and consumption-export ratio increases, here we see the economy *rebalances* towards a consumption-oriented economy.

It is important to notice that, in this example, economic growth (wealth of the nation) is achieved by redistributing profit towards wage - a scenario that is the contrary to the Mercantilists' vision. As discussed in section 2, the Mercantilists envisioned an economy with continued growth and low wage, but the domestic slack in aggregate demand due to low wage is "vented" by favorable trade balance. We will explore this option in the next subsection.

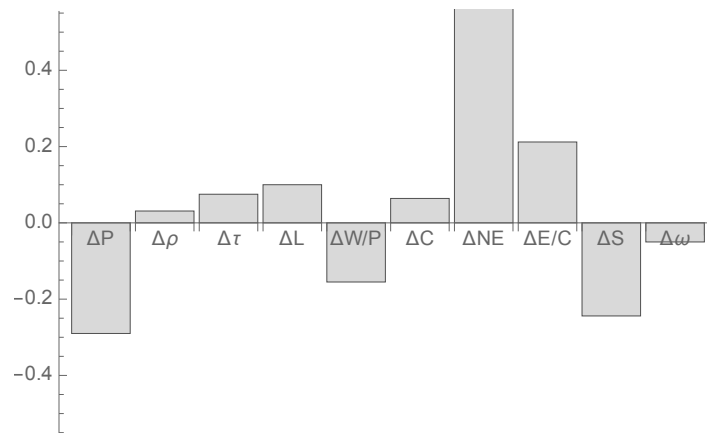## 4.2   Closure II: Mercantilist Trade-Led Growth

Let us now consider conceptualizing policies that are "mercantilist" in our modeling framework. A policy is considered "mercantilist" when it actively tries to increase net exports. This approach is criticized in almost every international trade textbook. However, there is an important but often ignored rationale behind mercantilist policy for having a favorable trade balance. As we reviewed above, export surplus is an important channel to absorb excess capacity and resolve the effective demand problem without the need of increasing wage. Conventionally, tariffs, quotas, and exchange rate manipulation are viewed as typical mercantilist policy tools; and on the technical side, instruments as such can be built into the trade function easily by adding a new policy variable. However, for a single country model similar to ours, adding a policy parameter such as tariff is not interesting because all it does is generating a windfall income (effective demand) for the home country via trade balance. Additionally, and perhaps more importantly, active trade policies by themselves are unsustainable at aggregate level because trade partners can easily engage in a trade war with the home country by retaliating using same set of trade policies.

Other than trade policies, what has enabled developing countries like China to go on an export-led growth path in a sustainable way for the past decades? There seems to be a consensus in the literature - low domestic labor cost. (Lim, 2014; Palley, 2011; Felip, 2003) But what determines domestic labor cost? From the neoclassical perspective, domestic wage is determined by the marginal product of labor, which ultimately depends on the relative scarcity of labor inputs in that country, thus export-led growth is the natural result of a country's engagement in international trade in accordance with its comparative advantage, and this framework can be extended to explain growth via either endogenous growth theory or the theory of dynamic comparative advantage. However, if we take on the classical political economy's view that wage is determined by exoge-

nous sociopolitical factors such as class conflict, negotiation power and domestic policies, then export-led growth via low domestic labor cost could very well be a growth path that is *mercantilist* in nature. Government representing the interest of capitalist firms can continue to effectively repress wage (or wage growth in a dynamical setting) if it succeeds in continuing increasing net exports.

In this closure of the model, the government is faced with same kind of planning problem: how would macroeconomic variables adjust to support a predetermined output growth? However, different from the first closure, in this case, exports and imports are determined endogenously via equations (2) and (3), and foreign-domestic relative price (P^*/P) becomes relevant via trade elasticities. In this scenario, exogenous output growth can be supported by two components of aggregate demand - real consumption and net exports. Simulation results are exhibited in figure 2 below.

Figure 2: Closure II: Mercantilist Trade-Led Growth

First of all, we can see that both real consumption and net exports increase to support the exogenous output growth as expected. However real consumption grows at a much slower rate comparing to net exports. To make export demand more attractive to foreigners, domestic price has to go down, and holding everything else constant, lower P also helps the growth real consumption C. Since price in this model is cost-determined as shown in equation (6), the observed price deflation has to come from the falling of the nominal wage (labor cost). As the economy expands, more employment is generated; however, the employment growth is not high enough to compensate the decline of nominal wage, thus income distribution has to adjust in favor of profit with increasing ρ and declining ω.

The fall of domestic price triggers the increase of export demand and the slow down of import demand via trade equations (2) and (3), hence we observe

the rapid improvement of trade balance (NE). Although price declined, nominal wage declined even faster, which results the fall of real wage (w/P), this in turn also limits the growth of real consumption. Finally, this process is associated with increasing exports-to-consumption ratio (E/C), implying that the economy is becoming increasingly export-oriented. It is important to notice that these results are very "mercantilist" in spirit: economic growth is supported by favorable trade balance while large population is employed and kept poor (high employment and low nominal and real wage).

Since the model itself is highly stylized and the simulation is done in a static framework, one should not expect the simulation results to replicate exact empirical macroeconomic outcomes. However, two things are accomplished in this exercise. First, it formally illustrates the underlying argument behind the mercantilist resolution to the effective demand problem - an economy can grow with low wage, and domestic surplus is "vented" via favorable trade balance. Second, these results qualitatively resemble some important features of economies that went on the mercantilist export-oriented growth path, namely, low wage, slow real consumption growth, exports expansion, and income distribution favoring profit (Increasing profit share and declining wage share).

An important question remains: is the mercantilist growth path sustainable in the future? The outlook is not very optimistic. First of all, to sustain such export-oriented growth, real wage and wage share will be continuously repressed, which intensifies domestic socioeconomic conflicts. Second, a necessary condition for such growth pattern to be sustainable is the ever-expanding global effective demand, especially from developed countries. One problem associated with it is obviously the aforementioned "fallacy of composition" problem. Moreover, given the existing productive and distributive structure of the world, a number of studies have found that the growth of global effective demand (especially for low-wage consumer goods) is likely to slow down and even contract in the near future. (Jiang and Caraballo, 2015; La Marca, 2013; Von Arnim et al., 2012) Third, the economy with high dependence on international trade tends to be quite vulnerable to external shocks that ultimately result domestic macroeconomic instability, and a typical example is The Great Trade Collapse in 2008-09 from which many export-oriented economies are still recovering from as of today. (UNCTAD, 2013; Nolan and Zhang, 2010; Baldwin, 2009)

Above all, the recent strong reaction of developed economies to "outsourcing" and it employment effect has popularized mercantilist sentiments in these countries who were the proponents of Free Trade. If the mercantilist growth path is unsustainable in the long run, what could be the alternative? The answer lies in the consumption-led growth. In theory, if a country is able to reduce its dependence on exports and increase domestic consumption, then this country would "rebalance" itself from a non-sustainable trade-led growth path to a sustainable consumption-led one. But how would a country "rebalance" the practical level? Wage increase is often the immediate answer. In the next
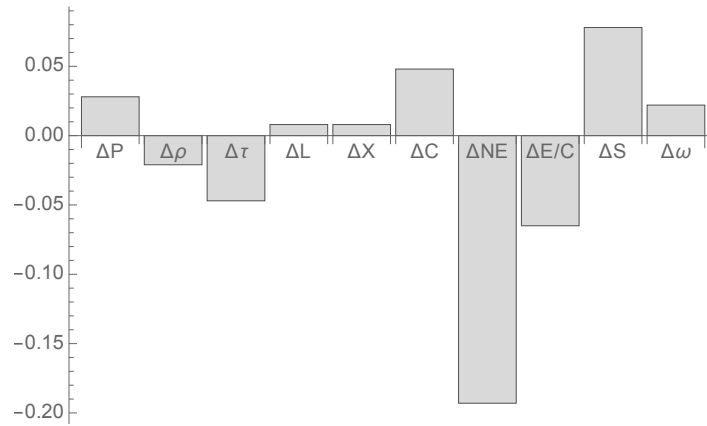
subsection, we examine whether a simple wage increase would help a country to rebalance from the "mercantilist curse".

4.3   Closure III: Wage-Increase and Rebalancing

The third closure of the model is designed to simulate the effects of wage increase on the economy. In this closure, we follow the typical Post-Keynesian practice by making wage an exogenous variable. Now, since we turned one of the endogenous variables into an exogenous one, the model is overdetermined; thus we have to "endogenize" an exogenous variable, and this variable is real output (X). Thus in this closure, there is no exogenously given real output growth; instead, there is exogenously given nomimal wage growth, and real output has to adjust endogenously as nominal wage increases.

Figure 3 below exhibits the simulation results with 10% wage increase.

Figure 3: Closure III Simulation Results

The effects of wage increase reveal a unique feature of this model. In this model, profit-maximizing firms, concerned with preserving world market shares, respond to increased nominal wage partly by raising prices and partly by cutting on their mark-up rate and profit share. Thus, we observe cost push inflation and at same time falling ρ and τ as the result of exogenous wage increase[14]. With higher domestic price, net exports decline due to the loss of price competitiveness of domestically produced products around the world. Wage increase triggers consumption-led expansion with higher output (X), employment (L) and consumption (C). However, the output growth in this case is very small;

[14]In conventional models with fixed mark-up, wage increase has to be completely absorbed by price increase, thus the result is often hyperinflation with constant income distribution (ρ and ω). This is obviously very unrealistic.

with 10% wage increase, output only grows for 0.8%. The main reason behind such small growth rate is that the contraction of net exports takes a severe toll on the aggregate demand, this is in fact consistent with the argument that wage-led growth is more difficult to achieve in an open economy (Blecker, 1989). Interestingly, with 10% wage increase, we observe relatively relatively weak real consumption response (4.8%). Such weak response can be partly explained by the relatively strong increase of total private savings of the economy (7.8%). Essentially, this is an example of the Schumpeterian "forced saving" adjustment. With the rapid price inflation caused by autonomous wage increase, households are forced to save more in real terms to resort the saving-investment balance [15], henceforth the slow growth of real consumption. Trade contraction combined with forced saving result slight output and employment growth as the result of wage increase. Although we do observe rebalancing in the decrease of E/C ratio, but it is accompanied with low growth rate.

Yet, there is another challenge associated with wage growth. In this model, for the sake of simplicity, we held investment demand as exogenously given at a constant level. More realistically speaking, investment demand is often a function of animal spirit, income distribution and aggregate demand. With declining profit share due to wage increase, capitalist firms might cut down their investment demand, which in turn creates negative pressure on aggregate demand and growth. This is known as the effect of "profit-squeeze".

What we have illustrated so far in this subsection are the challenges countries might be facing when they try to switch away from a growth path that is mercantilist in nature to the one that is consumption-led. The mercantilist growth path makes a country more export dependent, and assuming this is a developing country that specialize in producing low-skilled labor-intensive goods and services, then its output price would be highly sensitive to wage, and to maintain competitiveness in the global market, they have to repress wage. People also found that labor intensive goods in the exports market tend to have higher exports-price elasticity (Wood, 1995), thus by participating in international division of labor in this way, this country might become even more dependent on exports. And once a country goes on such growth path, rebalancing via wage increase is likely to result slower economic growth due to trade collapse and forced saving as illustrated in the simulations above.

5   Concluding Remarks

The development of international trade theories has turned mercantilism into an obsolete boutique that appears in the beginning of almost every international trade textbook. Students are seldom reminded that mercantilists were perhaps

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[15]Recall the saving investment balance: $S = P \cdot I$. With price inflation and investment (I) held constant, S has to increase to resort the balance.

the first group of people who started thinking very seriously about the relationship between growth, distribution and trade. Concerned with the well-being of a national economy in the early development of capitalism, mercantilists developed an interesting "dual approach" that is both supply-side and demand-side. Their supply-side of thinking argues for the importance of keeping production cost low. However, they are also aware of the fact that labor is the most significant cost of production, but low wage would result obstacle in valorization of stock of output, reflected in a sluggish effective demand. This reveals their demand-side of thinking. To resolve the effective demand problem, mercantilist turn to foreign market, and argue that slacks in aggregate demand as the result of low wage can be picked up by favorable trade balance. In this paper, we argue that in todays world, mercantilism is not passé, even if it is not what it once was. In the name of export-led growth, the mercantilist dynamic is still effective in suppressing wage share and real wage around the globe while some countries are able to maintain a reasonable rate of growth, especially for those whose productions are mainly labor-intensive. However, we have also pointed out that such growth path is not sustainable both socially and economically over long-run.

The Mercantilist view on growth, distribution and foreign trade is also explored using a simple modeling exercise in this paper. With fixed exports and import propensity (so the channel for trade-led growth is closed), predetermined output growth is supported by consumption and real wage growth with distribution of income favoring workers. However, when exports and imports are determined endogenously by international relative prices (so foreign trade becomes another channel for growth), we observe a vivid example of mercantilist mechanism. Exogenous output growth is supported by favorable trade balance and slight consumption increase while domestic price is kept low. More people are employed at lower (both nominal and real) wage rate. The mercantilist export-led growth also results the distribution of income favoring profit. Finally, simulations have also shown that if a country were to switch away from the mercantilist trade-led growth to the wage-led one simply by raising wage only, the rebalancing might be accompanied with much slower growth due to trade collapse and forced saving; the redistribution of income from profit to wage *might* also result "profit-squeeze".

The question still remains: if the simple nominal wage rise were not enough, what else will be needed in order for a country to rebalance from the mercantilist growth path? Based on the modeling exercises, we have following suggestions. First, what needs to accompany with wage increase is some mechanism that controls aggregate price-level. If we go back the the markup equation (6), we would realize that if wage increase were accompanied with appropriate decline of profit share (ρ) (that would imply weakened markup power for the firms), then it will help keeping inflation under control. Although this is already happening in the third closure of the model via firms' profit-maximizing behavior of cutting mark-up to preserve their international market share. However, such

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decline is not strong enough to generate enough growth. Using direct policy interventions to keep profit share low with high wage is an option, but this requires careful scrutiny because a severe "profit-squeeze" could be the immediate outcome. Hence, this policy also needs to be complemented with other (perhaps expansionary monetary) policies to prevent investment demand from falling too much. Second, government should provide better social safety net so that household saving propensity declines, and this helps the rebalancing in two ways: 1. consumption demand will becomes more sensitive to wage increase; 2. it counteracts the forced-saving effects. Third, if a country were able to produce exports that are less sensitive to international price ratio, it will also help the rebalancing process because this essentially gets the country closer and closer to the scenario as modeled in the first closure. One way to do so that is mentioned a lot in the literature is called industry-upgrading, which involves switching to specializing in producing high value-adding goods with higher skilled labor and technology content. Needless to say, to do so requires active industrial and trade policies (Rodrik, 2010; Chang, 2007)

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