As clearly as you can summarize Ricardo and Marx's labor theories of value. Make sure to explain how and why each author believes that prices will deviate from values along with the implications they draw from the deviations. Furthermore, discuss how Marx and Ricardo's theories differ. Finally provide your evaluation of the theories.

In his book *Principles of Political Economy and Taxation*, author David Ricardo builds his framework for the labor theory of value which author Karl Marx develops and critiques in his own book *Capital*. While Ricardo analyzes and dismisses many of Adam Smith's theories to build his model that sometimes makes unrealistic assumptions and contradicts itself, Marx takes Ricardo's micro perspectives to a more macro level to analyze theories on a broader sense and develop labor theory that edges towards his critique of capitalism.

Both Ricardo and Marx agree in generality towards the labor theory of value but each have slight differences. According to Ricardo, the value of a commodity as well as the value of other commodities it will exchange for are determined by the comparative quantity of labor required for production and also take into account the labor required for the machinery (spread over time) as well as the raw materials. For Ricardo, the wages for the workers are determined by the value of necessities that an average worker needs to sustain his family. Profits for the capitalist then become the leftover after he sells the product and deducts the wages of workers, the loss to his machinery as well as the cost of raw materials.

Marx, on the other hand, builds upon this general theory by Ricardo and further digs into Ricardo's ideas, adding more branches to it and ultimately looking at it from a broader perspective to explain his theory. His labor theory of value states that the value of a commodity is rightly measured by the number of "socially necessary" labor hours required to produce that commodity. Marx believed that labor was the only common characteristic between all goods in the market and should thus be used to explain relative price differences. Additionally, for Marx, labor power is a commodity like all others that can be bought and sold in the market and whose value (wages) could be determined like all other commodities. Like Ricardo, when Marx mentions 'socially necessary' labor, he means the average amount of labor required to produce this commodity.

Before we look deeper into these theories, it is necessary to understand what "value" means to each author to understand how they relate to the other concepts they develop in explaining the labor theory of value. Ricardo's believes commodities have value because of their 'value in exchange' or 'value in use'. Value in use is a measure of utility and is something essential for an object to have if it were to have a value in exchange- the power of purchasing other goods. Then, utility giving commodities have this value in exchange because of scarcity or because of the labor needed to acquire them. He is quick to dismiss scarcity value because most of the commodities aren't rare materials and the common ones that economies require can be increased in quantity by the exertion of labor. Therefore he sees labor as a foundation of all exchange value and develops his the relation between exchange value and relative prices.

Marx is more advanced than Ricardo and rather than using assumptions to simplify the differences in commodities, he discusses the nature of value, how value is added to commodities and how everything from quantity to quality can be boiled down to labor hour terms. For Marx, it is utility that gives a commodity value and that a commodity without utility will have no value. Therefore, for commodities that have utility, each has three common characteristics: their use value, their exchange value because of the expenditure of labor. Exchange value or the quality by which a commodity can be quantitatively exchanged with other commodities, he says, exists in the society because of the need to trade and is something that changes between time and place. And, use value or the quality of a commodity to satisfy human wants, is the material manifestation of human labor embodied for its creation is what remains after subtracting trade value. Marx further builds on this and states that it is the expenditure of labor that gives an item value but the expenditure of special labor, which adds 'use value' (or qualitative value) to this item.

Thus, by breaking down value of a commodity like this, Marx shows the readers how; it is labor then that remains the only common characteristic to compare commodities. Labor creates exchange value in a commodity and is responsible for adding use value and since one can reduce qualitative value as well as quantitative value in terms of measureable human labor, we can accurately compare values across commodities using labor hours as a standard. Even though both Marx and Ricardo reach the same conclusion, I believe Marx is much more accurate in his explanation as to why a commodity has value and why labor is what should be

used to compare values across commodities. Now, let us look at why each author believes prices will deviate from value.

Ricardo believes the prices are proportional to the total amount of labor required to create that commodity. For Ricardo, wages and profits are the only component parts that determine the price of a commodity. Rent is simply the excess profits that go to the owner of lands of higher productivity. The labor, includes machinery/capital, which is the simply the result of past labor expended to create it. He says that even if commodities require the same amount of labor, their prices might not be equal/proportional because different industries use different capital to labor ratios in production. This cost of production that determined the prices is dependent on the wages paid to the labors as well as the amount of necessary profits. Prices, for Ricardo also depend heavily on the profit rates because when wages change, a higher profit rate would lead to a higher change in relative prices between two commodities.

For Marx, social commodities that have value command a price as a measure of that value which they possess. The abstract labor (or labor specifically added to create a commodity for sale), which a capitalist buys in the market, is what adds value to a commodity. But, Marx says, the price of a commodity will never be equal to the amount of labor-power put into it because from the sale of that commodity, the capitalist will also seek to make profits on his investment. A capitalist purchases labor power, uses it to create a commodity that will sell for a higher value, which are the rewards to the capitalist (surplus value).

Another reason why each author believes prices will differ from value is that value depends on labor embodied in commodities but differences in value of capital per man would cause this variation in prices. Marx and Ricardo both agree that while relative values/prices between commodities are determined by the difference in labor embodied in them; prices are also affected by wages paid to the labor. And, wages depend on how much it costs the labor to sustain his livelihood. Likewise, different industries with different capital to labor ratios are not affected equally when wages change. Ricardo chooses to dismiss this as a trivial change, mentioning that the average will remain the same when all industries of different capital to labor ratios are taken into account. Next, Ricardo claims that even though wages and profits might go up they might affect prices but will not affect relative values across commodities because the cost of necessities that a worker needs defines wages. Wages can only change when the relative values of those necessities change.

Marx, however, sees skilled labor as a multiple of unskilled labor because labor power was spent in acquiring this skill while Ricardo does not take this into account because he looks at differences in skills across industries and time and says that they operate equally on each period. Here, Ricardo makes another simplistic assumption that the skill of a labor and differences in efficiencies between different classes of labors will have already been adjusted because these differences are dynamic. Value and thus prices then cannot deviate because of these in a short time period because they will already be in the correct position. For Ricardo, since we are talking about the relative value of commodities across time, the same comparative skills operate in both periods and while the workers from previous period might become more efficient, the new ones in the next period will balance things to a roughly similar average.

Thus, each have their own explanation as to why values deviate from prices. While Ricardo sees value and prices in all commodities that have utility, Marx says that only commodities that are produced to be sold in society command a price and thus have value. Both their theories are very similar in some aspects while different in others.

One major flaw in Ricardo's theory is the simplifying assumption that he made that value will not differ much because of change in wages. With technological progress less and less labor will be required for production as time progresses and thus wages will affect prices in different rates across different periods of times. The normal rates of profits will have to be maintained on each period of time for capitalist to forward their stock and thus the exchange value/ prices will be different in each. His labor states that a deduction in labor input should the exchange value, which would lead to a change in prices. But, this change in relative prices would only be the same if the labor to capital ratios were the same; but they also change with technological progress. This leads to contradictions within his theory, as labor can now no longer be used as an invariant measure of value.

Meanwhile, Marx, when he develops his labor theory of value focuses more on demonizing the capitalist class for their exploitation of labor in order to extract that surplus value off labor power. Marx fails to take into account that the profit that the capitalist seeks in return for forwarding his stock is simply the reward for his risk. Ricardo would describe this reward, as normal profits, which he says is the minimum a capitalist would seek in return for investing his stock. Marx also fails to dig deeper into how prices are deviating from real values and does not sufficiently explain the effect of different capital to labor ratios. However, by taking labor-power

as a commodity that is sold to the capitalist gives his theory a significant advantage over Ricardo's theory and helps explain many of the assumptions that Ricardo made.

Both the labor theories of Ricardo and Marx do a good job of explaining value of commodities and differences in prices from values. Marx, fills in many places of Ricardo's framework and explains his theory in an in depth macro perspective; making his theory an advancement of Ricardo's labor theory of value.

2. As clearly and completely as you can summarize Ricardo's theory of distribution and how it relates to value and growth. Thus, you will need to provide a summary of the theory of rent and wages then within the context of a growing economy demonstrate what happens, and why, to the distribution between rent, wages and profit along with the relevant changes in prices and the profit rate. Finally, evaluate Ricardo's theory within his framework.

David Ricardo in his book *Principles of Political Economy And Taxation*, discusses his theory of distribution of income between the three major classes of society: the laborer, the landlord and the capitalist in the form of wages, rent and profits respectively. To understand his theory of distribution we will individually look into each of these complimentary theories and see how they relate to one another in the context of a growing economy.

Firstly, we shall look at the fundamental labor theory of value. This theory of value says that the value of a commodity is determined by the amount of labor needed to produce it and includes all costs including the labor cost of shipping and of fixed capital-which is simply the product of past labor. Using labor as a common between all commodities Ricardo explains the differences in relative values across commodities. Ricardo then builds upon this to explain relative prices between commodities; which he says depends on the proportion of labor required and profits needed for the capitalist. The least fertile land being cultivated determines prices, wages and as well as rent for other lands with higher fertility. While Ricardo admits that changes in wages will to some extent affect the value of a commodity, he says the effect is negligible if we look at the average of capital to labor ratios and fall in one side of the average will cancel out the rise on the other side.

Profits, for Ricardo was what is left over after paying the wages to workers. This profit should be at least the equal to the 'normal profit' rate in order for a capitalist to forward his stock. We can think of normal profits as a return for risk taken in investing. Capitalist always

seek to maximize their profit rates and will invest or divest between companies in response to changing profits rates. This tendency of capitalist is what changes the distribution of capital within an economy and equalizes all rates of profits across agricultural land as well as industries across the economy. For Ricardo, the variation in the value of money will make no difference in the rate of profits because it will everything from the value of his machinery to his stock equally and the effects would cancel out. However, as society grows and more of less fertile land is cultivated, productivity of workers fall, the excess profits for the owners of more fertile lands gets distributed to the landowners as rent.

Wages are what workers are paid in compensation for their work. For, Ricardo this natural price paid to the laborer is always equal to the minimum amount of food and necessaries that the worker would need to sustain his livelihood. But, rather than using money, it is more useful to look at wages in terms of the relative valuation of these necessities. Then, there is the market price for labors, which is the wages the workers are receiving at a particular time period. The market price will always tend to move towards natural prices because if market prices are higher than natural prices, population will increase and more labor will be supplied until they come down to the natural prices and vice versa if they are lower.

Wages, then, keeping the value of money constant are also depended on the demand and supply of labor. In a growing society, the natural price of labor (wages) will always rise with time because the real prices of the commodities that the labor needs for sustenance will go down. There might be short term increase in these prices of these commodities as lands of lesser fertility are brought into cultivation, but as technology progresses at a rate much higher, it will counteract this effect and lower prices in the long run.

The laws that regulate profits are very different from the always that regulate rents and work in opposite directions. Rent, Ricardo says is the amount paid to the owner of the land to use the indestructible powers of the soil. Rent can only exist when there are differences in productive powers of land. When land of lesser fertility is brought into cultivation to meet the demand of the growing population, rent will commence on the land of higher fertility. Since the land of the least fertility being produced determines prices as well as wages, and this last capital employed will always require a 'normal' rate of profit for a capitalist to want to forward his stock; this will leave the more productive land with a higher rate of profit.

Finally, in the context of growing economy, as population grows and more food is demanded, lands of lesser fertility will be brought into cultivation. The labor productivity will be lower in these lands. Therefore, in order to receive the same amount of normal profits, the prices of this commodity must go up. Likewise, as real value of food from these agricultural lands go up, it also means an increase in the natural wages of the works; market wages, which follow natural wages will soon go up too. The effect of the increase in prices all across means higher profits for the capitalist cultivating more productive lands. This difference in profit rates will not hold because capitalist always tend to reallocate their capital to receive most return and will be willing to offer more money for the better lands. And thus the excess profits are simply redistributed to the landowners in the form of rent. For Ricardo, it is not because prices are expensive that rent is high but rather that rent is high because prices more expensive as a result of cultivating lesser fertile lands. Rent then is not a component part of prices and a symptom rather than the cause of capital accumulation.

Thus, Ricardo's theory of distribution, based on the division of the overall produce (and not its value) between the landlord, the capitalist and the laborer dictates the distribution or changes in rent, profit and wages. To understand, how these principle theories add together to compliment Ricardo's theory of distribution we shall look at how each interacts with one another.

Ricardo explains this in terms of a simple wool and silk market model. We know that it is the relative amount of labor that decides the exchange value and thus the prices of commodities. When prices of a silk changes in response to increase in demand, profit rates will be higher for the producer of that commodity. Seeing this higher profit rates, capitalists will be attracted to invest in this silk. This will lead to them taking away some capital from the wool market as there would lesser demand for it and reinvesting it in the silk market. To meet this demand lands of lesser fertility will be brought to production. Since the least fertile land determines wages and prices, the price of silk will go up because of the decreased productivity of labor in this land. This will temporarily lead to higher profits for those cultivating it in lands of better fertility but these profits will soon re-channeled to the landlords in the form of rents. This is because capitalist will be willing to pay that rent in order to see the most return for their investment of capital. In this way, more capital will be invested in this industry and the excess profits will be brought down to the normal rate of profit.

To understand the changes in wages in relation to this re-distribution of profits, we must understand that wages change in relation to demand for labor. Wages go up when demand for labor goes up, as more and more land is brought into cultivation, more labor will be demanded. For capitalist to be able to bring this land into cultivation, they will need an accumulation of stock because of an increase in profits. However, each successive new land brought into cultivation squeezes the rates of profits because not only are wages going up because of increased demands, but also the productivity is also lower in these lands. This will cause a general fall in prices for the commodities across all plots of land because two rates of profits cannot exist and will eventually be equalized by the capitalists seeing higher returns of their capital. The result of this is a fall in accumulation of wealth for those who employ the capital but a rise in rent for the landowners.

All in all, Ricardo's theory of distribution for me is too simplistic and the fails to clearly explain things in a broader perspective. His simple two commodity models fail to work on a more dynamic economy where the accumulation of capital is constantly reinvested into the economy not only into wages but also into fixed capital. His distinction of the three classes (the labor, the land owner and the capitalist) fails to capture how each is creating a demand and supply within them as well. The accumulation of rent that the landowner gets could also be coming back into the economy as further investments in new lands. In the context of a national economy, the population change because of demand and supply of labor doesn't happen as fast to bring wages to equilibrium. Furthermore, during the development of his theory of value, Ricardo dismissed the differences in capital to labor ratios across industries in determination of value, as he believed they had little effect when wages were changed. This assumption carries on and affects many parts of his theory of distribution, which he fails to address in his book.

Briefly explain Adam Smith's theory of capital accumulation and the possibility of a falling rate of profit. Next, explain how and why Ricardo rejects Smith's explanation of a falling rate of profit. Finally, after discussing Marx's theory of capital accumulation and the falling rate of profit, explain whether his ideas follow from Smith and Ricardo or serve as a rejection of their idea.

Capital accumulation, according to Adam Smith happens when a parsimonious capitalist either reinvests part of his revenue towards expanding his original capital or lends it out to receive interest. If instead of adding the profits to his exiting capital, he decides to consume it,

accumulation will not take place. The total produce of productive labor is used to replace the original existing capital, provide revenue for the capitalist and pay rent to the landlords. The revenue when reinvested allows the capitalist to increase his base of production by hiring more labor or buying more machinery or even bring new lands into cultivation. The capitalist will always seek to increase and reproduce profits.

However, this accumulation because of high rates of profits can only continue for so long. Resources are limited in nature and land cannot be endlessly productive. After a point, the productivity saturates. Labor too is of a somewhat fixed nature given that one cannot suddenly increase the supply of labor in response to increase in demand. As capital accumulates and more capitalists compete with each other to invest in these industries with higher than average profits, there will be an increase in demand for labor. This increase in demand for labor leads to an increase in wage rate. Since we know that wage rate is a component of prices, the increase in prices will lead to a fall in profits. The profits then continue to call until they reach the average rate of profits. At this point there will be no point in reallocating capital into other industries because the all the rates of profits will be the same.

Later on, this theory of accumulation and fall in the rates of profits by Smith is critiqued by Ricardo, who develops his own theory of accumulation and reasoning for the fall in the rates of profits. Ricardo supports Adam Smith's claim that the rate of interest is governed ultimately governed by the rate of profits but is subject to fluctuations. However, this rate of profit will be extremely difficulty to judge therefore Smith takes an average of the rates of profits. Conversely, Ricardo is dismissive of Smith's explanation that it is always because of competition to invest capital that the rates of profits will fall. Ricardo believes Smith's claim did not take into account the difficulty of providing food for the additional number of labors needed, this in turn would have raised the wages because of the price of sustenance for the labor now being higher.

Ricardo does not dismiss Smith's claim that profits depend on wages, wages on the prices of necessaries for sustenance for the laborer, and the price of these necessaries on the price of food. For Ricardo too, nothing can change profits but the change in wages and profits will change in proportion to change in wages- at least in agricultural lands. However, unlike Smith, Ricardo does not believe that the rise in wages will raise the price of commodities even thought it would ultimately lower profits nonetheless. Ricardo uses his theory of rent to explain how these profits

get redistributed when prices change. Moreover, he builds on his theories to add that even if the price of commodities were to be rise, the profits would still fall.

When, because of increasing demand, newer lands of lesser fertility are brought into cultivation, the lands with higher productivity will command a rent. Lesser fertility will mean lower productivity of labors and thus higher prices are needed for its produce to pay wages for these labors and maintain the normal rate of profit. However, these higher prices mean higher profits for the better plots of land. But, since capitalist always seek the most return for their forwarding of stock, investors will be willing to pay for the better land to obtain higher rates of profits. Thus, cultivation of land of poorer fertility distributes the excess profits to the landlords owning lands of higher productivity. More over, it is always the land of least fertility, with no rent, that determines of wage rates as well as prices for agricultural commodities.

These lesser fertile lands lead to higher prices of necessaries and thus a higher natural wage rate for the laborers. The market wage will then follow in the same direction. This leads to a fall in profit rates across all industries as long as it is accompanied by a rise in wages. In case of manufacturing industries the effect occurs in two folds, the rise in price of raw materials because of more labor being expended in harvest is what leads to the their prices going up; and, the wages of labor also go up as a result of necessaries being more expensive.

Ricardo concludes that it is thus a natural tendency of profits to fall as society progresses and accumulates more because the additional demand for food is what leads to diminishing productivity of labor and eventually higher wages. The fundamental motivation of people to accumulate is to make their accumulation productive by employing it to obtain profits. It is then the effects of accumulation that lead to a rapid fall in the rate of profits and a rapid rise in rents. This accumulation comes to a halt when profit rates are so low that people stop investing and additional labor isn't demanded because investments do not provide sufficient compensation for the effort and risk taken.

Marx on the other hand develops a somewhat different theory of capital accumulation and fall in the rates of profit. Marx's theory builds on his labor theory where he makes the fundamental distinction of treating labor-power as a commodity. He sees it as a unique commodity with the capacity not only to replace the value it consumes but also to add more value than is paid for it (wages). According to Marx, only social commodities can possess value because they can be exchanged in the market. Profits, or surplus-value as he puts, is the

difference between value put into production and value received from the sale of final commodities. When a capitalist advances his stock and purchases labor-power, he seeks to gain as much surplus value as he can from the exploitation of his workers. The rate of surplus value grows as the productively of the worker increases as well as when the capitalist increase the length of the working day.

Marx sees surplus value as revenue flowing out of capital and is something that the capitalist seeks to reproduce more of by reinvesting it back into production. The more a capitalist saves and reinvests, the more surplus value and revenue he gets in return; society enters a spiral of capital accumulation where "capital creates capital". Marx believes that this spiral of capital accumulation works in the favor of the capitalist in many different ways to increase his rate of accumulation. Firstly, as productive powers of labor grow, the capitalist will be able to invest in constant capital (machinery) to increase the scale of reproduction. Secondly, with progress and the accumulated capital, the capitalist will be able to invest in better constant capital that will require less labor. Thus, Marx's theory of accumulation says that the rate of accumulation of capital is independent of wages the labors are offered because it is the very absence or excess of exploitable labor that creates these opportunities for the investment of accumulated capital.

However, the technological progress with time and accumulation improves variable capital leading to lesser demand for workers. More of the accumulated capital gets reinvested towards constant capital in the process of reproduction. Therefore, since labor is the foundation of surplus value, the rates of profits will fall as accumulation grows.

Marx rejects the classical view held Adam Smith and Ricardo in their explanations of accumulation in a society. He thinks that even though they were right to mention that the consumption of profits by the productive laborers was vital feature required for accumulation, they were wrong to say that capital only goes to variable capital (wages paid to labors). In explaining accumulation in the context of annually circulating capital Smith merely mentioned that capital goes to wages for labor despite having previously acknowledged that capital is composed of constant and variable means of production. For Marx, Smith has misidentified accumulation with consumption by the productive laborers simply turning surplus value into labor power.

One aspect that Marx completely ignored in his theory would be that of rent paid for the use of land. Also, Marx does not look at these surplus values as a reward for risk taken by the

capitalist in advancing his capital; he sees capitalist as evil men who give the "illusion of abstinence" to put labor in a kind of "economic bondage" to exploit their capacity to work. While Marx makes significant development in aspects of the theory that Ricardo and Smith overlooked, he does so from a very one-sided view aimed to demonize capitalists. The reinvestment of accumulated surplus value towards both the variable and constant capital give his theory a significant edge over the classical economists but his failure to look at rent leads to some inconsistencies.

Briefly summarize Smith's explanation of the determination of relative prices in the "early and rude state of society." Why did Smith believe that the determination of relative prices must change when the society advanced beyond the "early and rude state"?

Adam Smith in his book *The Wealth of Nations* talks about how relative prices are determined in each state of society. Smith looks at what makes up the component prices of commodities and how these components vary in proportion within these different states of society to tell us how the determination of relative prices changes accordingly.

For Smith, labor is the real measure of exchangeable value of commodities and the only universal standard across which one can compare different commodities at all times and places. Likewise, money is the exact measure of this real exchangeable value and therefore the relative price a commodity commands should is equal to the quantity of labor it can purchase at that particular time and place. When Smith made these claims in the early chapters he was developing his labor theory of value to explain the relative prices of commodities.

These theories hold perfectly in the 'early and rude state of society'. At this stage the proportion between the quantities of labor necessary for acquiring different objects is the only rule one needs to look at in deciding the exchangeable value between commodities. At this stage of society, in which there is only the laborer and his produce, the whole produce of labor belongs to the laborer. Thus the real value or relative price of that commodity at this stage depends solely on the quantity of labor put forth and is the only component of price because it regulates the exchange value.

However, in later stages of society where there are capitalist who have accumulated stock to advance and seek to employ labor in order to add value to commodities and sell it for a price, the components of prices changes. These capitalist seek profits in return for the risk they partake for

forwarding their stock. The capitalist will seek more than what is sufficient to replace his stock and he will seek these profits in proportion to the amount of stock he has forwarded. In this way, profit becomes component part of price and the entire produce of labor no longer belongs only to the laborer; the laborer must share it with the owner of the stock.

As society progresses further, and capitalists have to rent land from landlords. The component of price now breaks down into wages for the labor, profits for the capitalist and rent for the landlord because of this appropriation of land. Even though the real values of these component parts of price are still measurable in terms of quantity of labor it can command or purchase, the very division into these components of rent, wages and profits means we can no longer use the same rules to determine profits as we did on the 'early and rude state of society'.

Similarly, these parts of price that resolves themselves into profits, wages and rent are different across the complex states of society as well. For example if we look at manufacturing, we will see that more portion of the produce goes towards wages and profits than it does to rent. In the improved societies, there can always exist some commodities whose price might resolve into wages and profits; and even some whose price might solely be determined by wages paid to laborers. However, the existence of these commodities does not allow us determine all relative prices in that time without looking at all the components of prices.

Thus, Adam Smith believed that wages, rents and profits remain the three original sources of revenue as well as of all exchangeable value for commodities that are produced in societies more advanced than those in 'early and rude states' and therefore the determinants of prices will vary because of this division of prices into its components. The accumulation of capital and the appropriation of land add the aspects of profits and rents to the existing wage component of price as society gets more advanced and thus the same determinants for relative prices no longer hold.

Evaluate Alfred Marshall's interpretation of Ricardo's ideas.

Alfred Marshall critiques the work of David Ricardo, particularly the first chapter of his book *On Principles of Political Economy And Taxation*. Marshall criticizes an array of Ricardo's techniques, spreading from the lack of flow in his writing to his simplification of complex doctrines. He uses various theories proposed by Ricardo to point out the inconsistences in them but, towards the end, admits that even though there have been many critics like him, some of

Ricardo's doctrines have remain mostly unchanged and that subsequent developments have in the direction Ricardo put forth.

Marshall dislikes the fact that Ricardo made simplistic assumptions to put up 'strong cases' which appealed to an audience with an existing knowledge of these doctrines; the businessmen Ricardo associated with. He is starkly against Ricardo's of use of facts that he appealed to him and did not in general apply to the actual world around him. He sees Ricardo's work as unsystematic and lacking logical completeness; hopping from one hypothesis to another. This, Marshall believe led to many confusions in Ricardo's explanations.

Marshall believed that by sticking to short phrases and not revisiting previously set assumptions and constraints, Ricardo simply "gave hints" to readers as to what the actual explanation is. Even in Ricardo's interpretations of Adam Smith, Ricardo is vague and short in description. However, Marshall admits that if one were to revisit every previously mentioned theory and use them to explain the poor choice of phrases in his later theories, one can correct most of these claimed errors in his work.

Even though Ricardo's work seems to be inconsistent and contradictory in many places, Marshall believes it is only because of Ricardo's lack of getting "hold of the right words". For example, when discussing the value of things in ch1, Ricardo says —"of which there is very limited quantity.... Varies with the wealth and inclinations of those who are desirous to possess them". But, in chapter 4, Ricardo says the fluctuations of prices are determined but the amount available for sale and "the wants and wishes of mankind". While these two phrases mean similar things and those with the "desire to ascertain" not take this as an error and understand the doctrine it is trying to explain; those without will see this as a flaw.

However, one aspect of Ricardo's work that Marshall despises is Ricardo's use of "shortcuts" to evade branching yet critical explanations by only picking a case that works in his favor. In explaining his theory of Value, despite knowing that commodities can either have increase, constant or decreasing returns, Ricardo assumed that they all follow the law of constant return and did not bother to mentioned his assumption he had made.

Building on to this, Marshall is also against the way Ricardo dismisses some of the initial assumptions later in the book and fails analyze in detail why he disregarded these suppositions. One example would be his use of a simple "early and rude" model of the society to explain the relation between value of a commodity and the relative quantity of labor required for its

production. Later, when he showed that these assumptions fail in more complex societies, and that changes in wages would cause a change in relative value and that skill of the laborer should be factored in; Ricardo simple disregarded these variations as being menial. Instead, Marshall believes, Ricardo should have analyzed why wages are different from one generation to another.

While Marshall believes Ricardo's work could use better flow and some repetition of core assumptions he made in the earlier chapters, he finds it better than Jevons's. Ricardo might have lacked mathematical knowledge (which can be seen in the overly simplified numerical examples within his work), but they weren't as hugely flawed in both logic and progression of causation as Jevons. Jevons, Marshall believed was "loose and inaccurate". Ricardo might have kept some of the more important concepts in the background and only discussed them later in his work, causing confusion in his readers, but he did not completely omit them. Ricardo was more philosophic in principle and close to actual facts of life than Jevons.

Overall, even though Marshall has points out major flaws in the progression of logic and arguments as well as the shortness of the explanations in Ricardo's work, he rightly admits that the errors are not significant enough to completely dismiss his doctrines. Ricardo might have been unclear of his theories at some point and wrong in his assumptions, but Marshall thinks he did a better job that some other prominent economist of the time.

Given our readings, evaluate Sraffa's assertion that theories of value are developed to provide general solutions to specific problems and the ideological bias in economics.

Piero Sraffa in his lectures on Advanced Theory of value and the Rediscovery of the Classical Approach talks about the various schools of thought and how the theories put forth by these prominent economists were subject to ideological bias. Moreover, he talks about how the prevalence of each theory was in someway influenced by the underlying problems society then faced and was also influenced by the economist's background. Sraffa uses the differences between classical theories and the marginal theory of values to show the fundamental ideological biases and how they have changed over time. Moreover, Sraffa stresses the need for study of the History of economic thought for one to provide pure economic analysis.

Sraffa believes economic theories arise from the attempt to find a general solution to concrete policy questions and is advocated forward to fight rival economic interests during that period of time. Moreover, these theories are have historically been employed to forward interests

of one economic class against the other. This can be observed when we look at what was happening to society when Smith proposed his theories compared to the society when Ricardo's theories replaced them as policy instruments; which too was later replaced by the marginalist theories.

When Smith's theory of value came out, the manufacturing class, which was against government intervention, was on the rise. Smith's theories of how the invisible hand kept the markets in the best equilibrium and the need for freedom of trade were what led to him developing the general laws and thus advocating it as a from of practical policies.

Similarly, further down in time, Ricardo's theories, which proposed that rent did not enter the cost of production and thus were taxable, looked for a political purpose and not a theoretical one. For Sraffa, the fact that Ricardo was a businessman who traded stocks meant that his theories were deeply influenced by his practical interests. Ricardo's was indifferent in looking at the influence of labor and capital in the cost of production (and his labor theory of value) because he only cared about showing that rent was not a component of this cost of production.

Ricardo's theories were used as a propaganda policy tool for the rising socialist movement when the opposing classes were the workers and capitalists. Ricardo's theory of value might theoretically work in the favor of the manufacturing class but given the political movement and the conflict between labor and capital, it presented a strong case for the labor. Ricardo's theory, which had 'revolutionary political implications' were replaced by the 'new' theory of diminishing marginal utility. This new theory had already been proposed decades before and was rejected; but, when it met the need of the running class, was enthusiastically adopted and advocated.

Sraffa then concludes that the differences in theories does not exist because of the 'objective circumstances inherent in the various industries' but 'is dependent on the point of view of the person acting as observer'. The fall of the classical economics and the change to the marginalist economics was because of fundamental 'change in the basis of the theory of value, from cost of production to utility'.

These show how there has always existed political bias in terms of what economic theories are popular based on how they solve particular problems faced by the society during that time. Moreover, the transition in prevailing theories over time shows how it is certain classes of societies and the interest they posses that not only popularizes but also in some sense influences

these theories of value. Next, let us look deeper into other economic biases and in the conceptual biases among economists that helped create these schools of thoughts.

In terms of the theory of Value, Sraffa believes that classical economist took the objective approach while the marginalist economists took the subjective one. Fundamentally speaking, the classical economists sought to discover the laws that determine the wealth of nations and its dynamics and to discover the laws that determine income distribution among the various social classes. On the other hand, the marginalist (Marshallian) economists seek to discover the laws that determine the economic behavior of individual human agents and the laws that determine the equilibrium price of individual commodities. This difference in goals is what makes their approaches objective and subjective respectively and also gives rise to the ideological bias in economics.

As time as passed, the theoretical domain of the theory of value has gradually changed since economists have perused different means of economic analysis. Sraffa believes this is the reason why there are different theories of value; because each includes different theoretical framework within its boundaries. And, also because different theories are pushed to popularity by different classes to provide general solutions to specific problems the society faces at that particular period of time.

Briefly explain Marx's theory of surplus-value. Now, were there insights from Smith and Ricardo that Marx could have drawn from in order to develop his theory? If so, what were they? Do you believe that Smith and/or Ricardo were attempting to arrive at Marx's theory of surplus-value? Briefly explain.

Karl Marx in his book *Capital* looks the process of how, in the process of production of commodities, capitalists churn out additional value from laborers to formulate his theory of surplus-value. Marx is deeply against capitalism for this very tendency of capitalists to extract additional value making them richer and richer. His distinction of labor power as a commodity is fundamental to his development of his theory and is something that distinguishes it from the theories of profits proposed by Adam Smith and David Ricardo.

For Marx, surplus value is created in the production process when the capitalist is able to get more value from his commodities than originally invested. The production of a commodity requires raw materials, fixed as well as circulating capital and labor power. But, Marx says that labor power is the only commodity in this process that a capitalist can extract more value out of

that was paid for. Laborers in exchange for wages sell labor power; and, wages must be equal to at least what the worker needs for the sustenance of his family. However, rather than looking at labor power as a commodity with a fixed value, Marx says we should look at it as a commodity with the "capacity" to perform work. And this capacity, Marx believes is pushed to more than what is paid out as wages to add that additional value into commodities.

Thus, labor power then becomes this unique commodity whose expenditure in production will not only replace the original value (paid out as wages) but will also yield a surplus value. This surplus value is simply the difference in the value paid out to labor power and the final value of the commodity. If labors were made to work only the amount required to create commodities of value equal to the wages paid out, there would be no surplus values. By exploiting that capacity of the laborer to work with longer working days, the capitalist is able to squeeze out more and more surplus value. Likewise, even as workers get more productive and can do the same work in fewer hours, they continue to widen that difference in value paid out as wages and value received from sale creating more surplus value for the capitalist. This in essence, is Marx's labor theory of value.

One insight Marx could have drawn from Adam Smith was that when Smith spoke up early and rude states of societies, all the produce of labor went to the laborers themselves. Marx, too in his work mentions that these surplus values cannot exist in simpler models where laborers create the commodity and exchange it with another. Marx makes it clear that it especially in capitalist productions where labor power is brought that these surpluses are created.

Furthermore, I believe Marx's concept of surplus value is very similar to that of profits for the capitalist in more advanced societies. While Smith recognized that these profits were the reward for risk that the capitalist received in compensation for forwarding their stock, Marx, on the other hand saw this extraction of surplus value as unfair to the laborers. Marx only explained the vicious cycle of this surplus extraction and capital accumulation from the capitalist's side and did not see these surplus values as the reason capitalists invested their stock to begin with.