Adam Smith on markets

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I Introduction

Although sometimes it was not clear what Smith presupposed in his economic theories. each economic theory might be different in its presupposition. Indeed, on the one hand, when, in Book I, Chap. V of *WN*, he differentiated nominal with real prices of commodities, he did not presuppose the neutrality of money. Whereas the nominal prices of commodities are determined by the quantity of money, the real prices of them are determined by the quantity of labor they contain (*WN*, I. v. 9-10). The two prices can differ, especially in the case of goods in distant places (*WN*, I. v. 20). This chapter is famous for introducing Smith's labor theory of value (for the theory, see Meek 1956, Chap. II; Peach 2009). When describing the theory, he did not presuppose the neutrality of money, and explicitly mentioned the effect of money on the price of goods. On the other hand, in Book I, Chap. VII of *WN*, the famous chapter for elucidating the market mechanism, Smith did not adopt the dichotomy of the prices he introduced in the Chap. V. Then, in the Chap. VII, he introduced another conception of natural prices suddenly. Then, he compared them with the market prices of commodities. Here, he presupposed the neutrality of money implicitly. He did not sometimes mention the prerequisite conditions of each theory explicitly.

Indeed, as I argue in this paper, when arguing the different stages of the market mechanism, Smith set the different conditions. In addition to the time span, Smith presupposed the different places where economic transactions happen. Time span is related to the places. Basically, although Smith sometimes referred to the market abstractly, he presupposed the concrete space of the market in his age. This context influenced his argumentation on the market mechanism. Further, he considered that competition was the foundation of behavior in markets, and that some people, inspired by their particular sentiments, try to establish institutions incompatible with competition. The function of markets depend on competition, and competition requires excluding certain kind of sentiments such as the desire of monopoly.

The market place is also the sphere where political and legal institutions influenced. This context influenced Smith's view of the market. In this regard, Viner (1927) pointed out the influence of the natural lawyers on Smith's market theory. However, as Hollander pointed out, although they have the idea of natural price, their theory of price had no self-regulating mechanism (Hollander 1973, Chap. I). In this regard, Montes saw the market mechanism as influenced by the newtonianism (Montes 2004, 144-159).

About the market mechanism, scholars have studied a lot. Viner saw Smith not as "a doctrinate advocate of laissez faire. He saw a wide and elastic range of activity for government" (Viner 1927, 231). Winch saw justice as the foundation of economy (Winch 1978, chap. IV). About the market mechanism itself, Hollander saw Smith's mechanism as trying to establish the long-term general equilibrium (Hollander 1973, Chap. IVl; See also Jaffé 1977). Samuelson wrote, Smith's "pluralistic supply-and-demand analysis in terms of all three components of wages, rents, and profits is a valid and valuable anticipation of general equilibrium modeling" (Samuelson 1977, 42). On the other hand, Blaug saw it as the partial equilibrium (Blaug 1996, 38) whereby demand and supply are harmonized in the market of one commodity. Certainly, when Smith considered the mechanism of the change of a price of in a market of a good without including the prices of other goods, the inclusion that was necessary for the Walrasian general equilibrium. The general equilibrium considered the simultaneous change and interdependence of the prices of all of goods. On the other hand, the partial equilibrium analyses each good has is own market without being influenced by the prices of other goods, and see the market as applicable for the other markets each of which has its own good. Smith was similar to partial equilibrium. However, Rothschild argued that Smith was not the precursor of the equilibrium theory because he did not mention "equilibrium" as the important word for considering economy (Rothschild 2001, 143-144). Certainly, when Smith explained the mechanism, he did not use the word "equilibrium." He also did not presuppose the maximization as the key economic concept on it (Rothschild 2001, 144). Further, as Rashid pointed out, Smith's mechanism had its own defect in view of the twentieth-century economic standard (Rashid 1992).

However, where as the above scholars judged Smith's economic theory in view of that standard, from another perspective, some scholars analyzed Smith's economic theory for its own sake. Richardson analyzed Smith's market theory for its own sake. Although the twentieth-century economists saw the equilibrium theory as incompatible with the theory of economic growth, Smith regarded both as compatible because he presupposed increasing returns (Richardson 1975). O'Brien and Sandamo considered how Smith's market theory was connected with his labor theory of value (O'Brien 2004, 91-98; Sandamo 2011. 35-43).

What is left to argue is what Smith presupposed in each different stage of his market theory and how, based on that view, he presupposed the time and place of markets when considering his market theory, and how people are deviated from prudent or socially-beneficial behavior in certain situations. Smith discovered his version of partial equilibrium including its own dynamics of equilibrium by which equilibrium is changed by the production factors such as wages, rent, and profits. Then, the change reflect the broader social conditions. This chapter considers Smith on markets, not "the" market as the abstract, and elusive space where no concrete space for selling and buying is designated. When he studied markets, he had concrete markets in Smith's age (Section II). Another backgroud on Smith's market theory was how his precursors argued prices (Section III). Based on these backgrounds, when considering his market theory Smith presupposed how markets were conditioned by time and place (Section IV). His market theory was based on how prices are determined by production factors such as wages (Section V), rents (Section VI), and profits (Section VII). This model presupposes the neutrality of money and one-country model, the conditions that involves their own restraint of economic growth. Through removing the restraint, Smith considered how to break the limit of economic growth modeled on one country. Then, Smith focused on money (Section VIII) and foreign trade (Section XI).

II Markets in historical reality.

Today, when people consider the market mechanism, the market mean the abstract mechanism. Although Smith himself sometimes mentioned in this manner, he basically presupposed the concrete place of markets, the place that was more popular than today. This section argues markets in historical reality.

Although the eighteenth-century Britain (and some parts of Europe) did not yet enter into the stage of the Industrial Revolution fully, and economic growth was gradual, not rapid, its economy was changing. Especially, various goods were produced not merely for people's survival but also for their enjoyment of consumption. More and more the middling people enjoyed consumption. As a result, to purchase more and more goods, people became industrious. Although the economy was still based on household-based, not company-based economy, each family produced its good for selling goods rather than self-subsistence (de Vries 2008). As a result, around 1770, labouring family's income increased most, and people enjoyed consumption more than ever. Because women and children became productive workers, they also enjoyed consumption (That is called "Consumer Revolution") (Horrell 2014, 247-248).

Along with the Consumer Revolution, the "revolution in retailing and marketing" happened. "Towards the end of the eighteenth century, the 'fixed shop" (permanent building, facing on to a street, with glazed windows) started to dominate the retail scene and has been seen as the start of a retailing revolution which encouraged consumerism" (Horrell 2014, 251). However, in the early modern era, not only the professional traders but also amateur, or non-professional sellers were still influential. There still remained barter (Lemire 2006, 245-246, 258). However, "officials at the manor, town, city and state levels approved some traders and struggled to block unsanctioned and illicit trade; but smuggled, untaxed, second-hand and stolen goods continued to flow through informal and formal commerce circuits" (Lemire 2006, 246).

Especially, governors designated markets as public space to buy and sell goods. Indeed, Samuel Johnson defined a market as "a public time of buying and selling" (Johnson 1755, "Market"). Markets are the public space where people buy and sell. There was the ideal of the "interface of producer and consumer in the open market, where as fair price could be achieved through negotiation and public opinion, was perceived." However, "this model had probably never been a reality and increasingly it became more unreal during the early modern period." In spite of that, "the authorities...clung to their Utopias. The practice of 'engrossing' and 'forestalling', that is buying up goods wholesale, or before they reached the open market, and then 'regrating' or selling them on profitably, were deemed evil and against national interest." (Cox 2000, 30.

Indeed, in Scotland in the eighteenth century, the open market was popular. Daniel Defore, in his *A tour thro' the whole island of Great Britain* (first published in 1724-27), depicted markets in Edinburgh. He wrote,

> The markets here are very well supp'ied [sic] with all the Necessaries of Life, and are mostly kept in distinct Market-places walled in...1. The Meal Market. 2. The Flesh Market. 3. The Poultry Market. 4. The Fish Market. 5. The Corn Market. 6. The Leather Maket. Besides these, there is a Weekly Market for all Sorts of Woolen manufactures, and Linen Cloth...The Market

> for Black Cattle, Sheep, Horses, and Grass, is kept in that large Space of Ground within the West Port, called the Grass Market (Defoe 1753, 77).

In Edinburgh where Smith lived, markets meant concrete places of markets where people could sell and buy.

However, the ideal of the open market was occasionally not in reality. As some pamphleteer argued, Within towns, there were "subaltern corporations. Such citizens, who, supply the wants of the community, in their buildings, clothes, furniture, equipage, utensils, &c...should never exposed to the rivalship of others, who live cheap in the country, and bear no burden within the corporation." (Frame 1769, 61). Against this corporation, this pamphleteer argued, "the general principal to be attended to, in the policy of markets for Substence, is *To lay them open to every person in the country, who has any article to provide*" (Frame 1769, 60). This was especially important for Glasgow sometimes suffered from the shortage of corn by bad harvest (Frame 1769, 69). Thus, monopoly formed by corporation and privilege was seen as obstructing the open market where any people can buy an sell.

These realities of markets were the background of Smith's argumentation on the market mechanism, as I argue in the next section.

III Prices and self-regulating mechanism before Smith

Before considering Smith, the section introduces how price and the market mechanism was discussed before Smith briefly.

About prices, natural price was already argued in scholastics, as young saw natural price as the price of satisfying justice, the price that was influenced by the scholastics (Young 1997, 126). Also, in the early modern era, natural lawyers such as Pufendorf and Hutheson argued natural price as the fair price as the standard of buying and selling at markets (Hollander 1973, Chap. I). In the early phase of this era, governors and magistrates designated the fair price of goods, especially subsistence. This reflected their argument. However, in Smith's age, this custom of public-designated price was, in many cases, out of practice. Smith himself did not presuppose that price when he referred to markets.

Unlike the natural lawyers, some people began arguing prices. For instance, Nicholas Barbon (1637-1698), medical doctor, parliamentarian, and the founder of the first fire insurance company, wrote, "the value of all wares arise from their use...The use of things are to supply the wants and necessities of man" (Barbon 1690, 13). Then, "the price of wares is the present value; and ariseth [sic] by computing the occasions or use for them with the Quantity to serve that Occasion" (Barbon 1690, 18). Price is determined by demand. On the other hand, some seventeenth-century writers recognized the importance of demand and supply to consider prices. For instance, Charles Davement (1656-1714), parliamentarian and political writer, saw prices as determined by supply and demand. However, he saw demand as the origins of corruption (Finkelstein 2000, 244-45).

The self-regulating mechanism was discovered in the last decades of the seventeenth century. Before that period, many mercantile writers on economic theories believed in the balance of trade. Especially, Edward Misselden (fl. 1608-1654), English merchant, used the term "balance of trade" at first. "Balance was a term borrowed from the Italian invention of double-entry bookkeeping" (Finkelstein 2000, 90). However, the balance of trade lacks the self-regulating mechanism. In the last decades of the seventeenth century, Sir Dudley North (1641-1681), who was born in an aristocratic family and became a merchant, paved the way for discovering the self-regulating mechanism, although the mechanism was still incomplete due to this belief in the balance of trade (Finkelstein 2000, 184). North wrote, "this ebbing and flowing of money, supplies and accommodates itself, without any aid of Politicians. For when Money grows scarce, and begins to be hoarded, then forthwith the Mint works, till the occasion be filled up again". By contrast, "whey peace brings out the Hoards, and Money abounds, the Mint not only ceaseth [sic], but the overplus of money will be presently melted down, either to supply the Home Trade, or for Transportation" (North 1961, Postscript). Although North did here mention prices, his theory included the self-regulating mechanism.

Richard Cantillon (1680-1734), Irish-born banker and economic writer mainly in France (Murphy 1986), also studied how prices are determined (Brewer 2006, 61-2; See also Hollander 1973, Chap. I). Whereas the intrinsic value or real price of goods are determined by land and labor, although the value is sometimes different from prices at a market (Cantillon 1755, 36). At a market, the suppliers of a commodity tried to increase its price, whereas the buyers tried to decrease it. When the suppliers expected that their goods would not be sold so well, they decreased the prices. When the buyers saw that many buyers tried to buy a commodity, some of them who ordered the higher price could buy it (Cantillon 1755, 155-58). Cantillon found out how sellers and buyers influenced prices. However, he did not hold the self-regulating mechanism of prices, unlike Smith. In spite of that, Cantillon thought that this market price was close to the real price (Cantillon 1755, 159). Although he did not analyze why both prices were close, Cantillon's comparison of two kinds of prices were reminded us of Smith.

David Hume, like other theorists on money, when considering his quantity theory of money, considered the linkage of prices with the quantity of money. Then, prices have their own self-regulating mechanism (Hume 1985a). However, the price of a commodity here were not liked with its demand and supply.

Turgot, in *Réflexions sur la formation et la distribution des richesses* in 1766, studied prices. Prices in exchange are dependent on the coincidence of buyers' desires with sellers' desires. Then, if sellers and buyers see each other's goods as equivalent, they exchange goods. When there are one seller of wheat and many suppliers of wine, the suppliers of wine who offers the largest amount of wine to be exchange for wheat can exchange their wine for wheat. Thus, supply and demand determine prices (Turgot 1766, 552-53). However, Turgot did not see the change of prices as self-regulating.

As a result, for Smith, the problem was to combine the price theory with the self-regulating mechanism. When tackling the problem, he still supposed concrete markets in reality.

IV The market mechanism: time and space

When Smith considered markets, he presupposed the different time span and place, the difference that influenced his market mechanism.

Exchange in markets presuppose natural price. At the outset of Book I, Chap. VII of *WN*, where

Smith explained his famous market mechanism, he considered natural price. He wrote, "there is in every society or neighbourhood an ordinary or average rate both of wages and profit in every different employment of labour and stock." This rate is determined by "the general circumstances of the society," and "the particular nature of each employment" (*WN*, I. vii. 1). Similarly, "in every society or neighbourhood an ordinary rate or average rate of rent." This rate is also determined by "the general circumstances of society" and "the natural or improved fertility of the land" (*WN*, I. vii. 2). Then, these three average rates "may be called the natural rates of wages, profit, and rent, at the time and place in which they commonly prevail" (*WN*, I. vii. 3). These three rates constitute natural price. The price includes the profit of selling the commodity again (*WN*, I. vii. 5).

The natural rates indicate that each society has each distinct natural rate, and might have the different average rate of wages, profits, and labour. Here, he focused on how market works in one society and its neighborhood. Market here means not universally abstract space which the Walrasian or present economics presupposes. It indicates the concrete market place. Indeed, when Smith mentioned the market, he referred to a commodity which is "brought to market" (*WN*, I. vii. 8). Smith used the phrase "bringing it to market" frequently in this chapter (e. g., *WN*, I. vii. 4, 5, 8, 9). To sell and buy it, it needs being brought to the material place of a market.

Then, because people exchange goods at a concrete market, the exchange here involves human relationship, which might obstruct the ideal activity of the market. The obstruction denotes what Smith presupposed. First, at the market, buyers and sellers determine market price. He wrote, "the market price of every particular commodity is regulated by the proportion between the quantity which is actually brought to market, and the demand of those who are willing to pay the natural price of the commodity...which must be paid in order to bring it thither" (*WN*, I. vii. 8). Here, Smith did not say that people bring the whole amount of the commodity, the amount that might be different from the quantity of it they bring to the market. However, Smith did not presuppose that people spared some parts of it. He supposed that he brought the whole amount of it to a market. Second, sellers can get only the "lowest profit" where "there is perfect liberty, or where he may change his trade as often as he pleases" (*WN*, I. vii. 6). He did not necessarily see sellers as producers. Professional sellers can participate in a market. However, because any seller can switch his goods to sell, the competition among sellers makes their profits the lowest.

These conditions involves the ideal of markets in Smith's age. Sellers should bring the whole amount of goods. This ideal of the seller reflected, as I argued before, the age. Then, ideally, markets were the place where sellers did not forestall the goods to raise their price, whereas they in reality experienced the forestalling. The forestalling or monopoly of goods meant that merchants spared goods not to bring to the market. He wrote, "the monopolies, by keeping the market constantly under-stocked, by never fully supplying the effectual demand, sell their commodities much above the natural price" (*WN*, I. vii. 26). Not forestalling meant not to spare goods.

In addition, Smith presupposed that anybody can be a seller. This also reflected his age. In Smith's age, he wrote, "the exclusive privileges of corporations, statues of apprenticeship, and all those laws which restrain, in particular employments, the competition to a smaller number than might otherwise go into them...keep up the market price of particular commodities above the natural price"

(*WN*, I. vii. 28). These regulations can prevent the freedom of selling. When sellers and producers were limited, they were less competitive. Smith succeeded in the ideal of the open market where fair prices can be attained through the competition between sellers and buyers.

At the first stage of the activity of a market, in which market price is determined, he presupposed another condition. In the short term, when "the quantity of any commodity which is brought to market falls short of the effectual demand, all those who are willing to pay the whole value of the rent, wages, and profit...cannot be supplied with the quantity which they want." As a result, "some of them will be willing to give more. A competition will immediately begin among them, and the market price will rise more or less above the natural price" (*WN*, I. vii. 9). By contrast, when demand falls short of supply, "some part must be sold to those who are willing to pay less, and the low price which they give for it must reduce the price of the whole." As a result, the market price is below the natural price (*WN*, I. vii. 10). Here, Smith did not assume the Walrasian tatonnement process whereby people transact the whole goods at once. Before the change of the price, some of the goods are sold. In spite of that, because of the inequality between demand and supply, the price is to be changed. Smith presupposed the market where people sell and buy at random. However, they sell or buy at the same market. Thus, they can see how much demand and supply are. Thus, they order the different price. Competition occurs where people can watch the economic behavior of others. Further, the stability of supply is assumed, the assumption that is based on the situation where sellers bring the whole amount of goods to a market.

However, after the market day, people go back to their houses outside the market, the houses that can be within the same society or neighborhood. Basically, they live in their physically close distance. When supply is above demand,

> Some of the component parts of its price must be paid below their natural rate. If it is rent, the interest of the landlords will immediately prompt them to withdraw a part of their; and if it is wages or profit, the interest of the labourers in the one case, and of their employers in the other, will prompt them to withdraw a part of their labour or stock from this employment. The quantity brought to market will soon be no more than sufficient to supply the effectual demand. All the different parts of its price will rise to their natural rate (*WN*, I. vii. 13).

Similarly, when demand is above supply, landlords or laborers or capitalists "prepare more land," or "employ more labour," or "stock in preparing and bringing it to market" (*WN*, I. vii. 14). After the market day, people understand the change of the price. Then, in the medium term, they change their amount of production factors such as land, wages, and capital. This change happens outside the market. Thus, it takes the longer time, during the time they can change their production factors. On the other hand, at the market, they cannot change the factors, so the stability of supply or stock is presupposed. Time span is connected with place where economic behavior happens.

Overall, Smith imagined that the market mechanism happened in the actual market place. For Smith used the phrase "bringing it [the commodity] to market" frequently. Because of this, in the short term, or at the market day, demand can be different from supply because supply cannot be changed. Then, the amount of demand determines the price. After the market day, or in the medium term, they go back to their home, and can change their production factors.

To function markets, Smith saw that monopoly should be excluded. He saw competition as the basis of people's exchange. Competition is obstructed by the monopoly of selling by guilds and corporations. depends on excluding monopoly. He denounced monopoly as leading to inefficiency of social resources (*WN*, I. vii. 25-26). This suggests that the regular functioning of markets requires the certain institutions to exclude non-competitive behaviour such as monopoly.

In addition this institutional presupposition, Smith presupposed the stability of the natural rates of wages, land, and profits in a society. Here, the equilibrium here is static. However, these three are produced or reproduced outside the market. Thus, when Smith studied the mechanism of each factor, he considered how the difference of society influenced that of the natural rates. Natural rates or price can differ in different societies. Then, he included variables which were influenced by the outside of market, as I shall argue three factors consecutively in the next three sections. As a result, the equilibrium can be dynamic.

V The dynamics of equilibrium and wages

Although wages, which constitute natural price, have their own natural rate in each society, the natural rate of wages are determined by the balance between labor demand and supply. Labor demand is determined by the conditions of society. In the long term, labor supply is also changed by population. Smith's wage theory includes the dynamics of equilibrium in labor market in which includes the change of population in the long term.

To describe the nature of wages, Smith studied how labor influence wages. Certainly, "the real value of all the different component parts of price, it must be observed, is measured by the quantity of labour...Labour measures the value not only of that part of price which resolves itself into labour, but of that which resolves itself into rent, and...profit" (*WN*, I. vii. 9). The "quantity of labour" only measures, not constitute the production factors. Although, before the establishment of private property, workers enjoy, the "proportion between the quantities of labour necessary for acquiring different objects seems to be the only circumstance which can afford any rule for exchanging them for one another" (*WN*, I. vi. 1). In this condition, the quantity of labor determines the exchange price of goods. However, after the introduction of private property in land and the accumulation of capital, "the whole produce of labour does not always belong to the laborer. He must in most cases share it with" landlords and the owners of capital (*WN*, I. vi. 7). Thus, although goods are produced by laborers, the sale of goods is to be shared with laborers, landlords, and capitalists.

Their human relationship determines wages. The combination of masters made them succeed in lowering wages. "To violate this combination is every where a most unpopular action, and a sort of reproach to a master among his neighbours and equals" (*WN*, I. vii. 13). Smith presupposed the determination of wages within a society or the narrow region. Then, due to the fewer number of masters than workers, masters can combine easily. On the other hand, workers sometimes united for raising wages. However, they "have always recourse to the loudest clamour, and sometimes to the most shocking violence and outrage. They are desperate, and act with the folly and extravagance of desperate men.” In this case, “the masters...never cease to call aloud for the assistance of the civil magistrate, and the rigorous execution of those laws which have been enacted with so much severity against the combinations of servants, labourers, and journeymen” (*WN*, I. viii. 13). Here, Smith depicted the social reality of how wages were determined. Unlike workers, masters could recourse to the laws. That recourse enabled masters to break the combination of workers. The political and legal framework of society determined wages.

In spite of that, “a man must always live by his work, and his wages must at least be sufficient to maintain him. They must even upon most occasions be somewhat more: otherwise it would be impossible for him to bring up a family” (*WN*, I. viii. 15). As I argue later, Smith thought that sometimes wages were below the level of reproduction.

Whereas Smith presupposed the stability of labor supply, to consider the change of labor demand in the short and medium term, Smith saw wages as determined by labor demand in one part (Another part is the price of food, as I shall argue later). He differentiated three cases of economic growth, the growth that determines labor demand and wages. First, in case of zero economic growth like in China, although the scale of economy of China was quite large, annual new employment was not increasing, so the shortage of hands did not happen. “There could be a constant scarcity of hands, and the labourers would be obliged to bid against one another in order to get it” (*WN*, I. viii. 24). Here, Smith paid attention to the involuntary unemployment, which causes the decrease of wages. In such a country, the wages were “the lowest rate which is consistent with common humanity.” For instance, “the poverty of the lower ranks of people in China far surpasses that of the most beggarly nations in Europe” (*WN*, I. viii. 24). The zero economic growth results in the shortage of employment, resulting in decreasing wages.

Second, even worse than China, some countries like Bengal and other British colonies in India suffered from depression. Smith criticized the government of India by the East India Company. Due to the bad management of the company, in these regions, the number of the new employment was decreasing year by year. Due to the over supply of workers, people harshly competed to get job. Thus, wages were below the adequate level of living (*WN*, I. viii. 26). This is through comparing non-European countries that Smith could analyze the difference of economic growth.

Third, in case of economic growth, He wrote, “it is not the actual greatness of national wealth, but its continual increase, which occasions a rise in the wages of labour. It is not, accordingly, in the richest countries, but in the most thriving...that the wages of labour are highest.” For instance, England is “a much richer country than any part of North America. The wages of labour, however, are much higher in North America than in any part of England” (*WN*, I. viii. 22). In North America, because of its rapid economic growth, labor demand was increasing, in spite of the increase of population, or labor supply.

In Britain, wages are also high. Smith indicated four kinds of evidence of the highness. First, although winter wages are the lowest, the living expenses are the highest because of the fuel cost. On the other hand, in summer where the expenses are the lowest, the wages are the highest. Thus, wages are not determined by the minimal living expenses, and are higher than the expenses (*WN*, I. viii. 29). Second, in last ten years, although the prices of food were high, the wages did not increase. Thus, wages were above the cost of minimal living necessities (*WN*, I. viii. 30). Third, in Britain, even in the regions of the lowest wages, the laboring poor could maintain their family. Thus, in the richer regions, they must enjoy necessities and conveniences (*WN*, I. viii. 31). Fourth, although the price of corn was higher in Scotland than in England where people were poorer, the price was not linked with the level of wages (*WN*, I. viii. 33). Smith here paid attention to the fluctuations of wages and the food prices. The level of food prices is not necessarily in proportion to that of wages.

Wages are high in the countries of economic growth. Although the combination of masters made wages lower, "the scarcity of hands occasions a competition among masters, who bid against one another, in order to get workmen, and thus voluntarily break through the natural combination of masters not to raise wages" (*WN*, I. viii. 17).

Whereas wages are determined by labour demand, they are also influenced by the price of subsistence not in nominal but real terms. In the eighteenth century, due to the improvement of agriculture, the real price of subsistence became cheaper than the seventeenth century. Thus, real wages, as how much people enjoy their subsistence, increased (*WN*, I. viii. 35).

In the long term, not only labour demand but also labour supply change. The latter is influenced by the change of population. When wages are high, labourers can feed their children better. Thus, many children can grow (WN, I. viii. 40). In Smith's age, many children died before they grow up. Better nutrition enabled more children to grow up. As a result, population or labour supply increases. Then, if the increase of population is in proportion to that of labour demand, high wages made population keep increasing. If wages are below the level of increasing population, population or labour supply decreases, and the decrease of labour supply makes wages higher ; by contrast, if they are above that level, population or labour supply increases, and the increase of labour supply makes wages lower (WN, I. viii. 40). In the long run, labour supply is influenced by the change of wages.

Overall, in the short and medium run, wages are determined by labour demand, the demand that was influenced by economic growth and the real price of subsistence. In the long run, wages are also influenced by the change of labour supply through that of population. Wages depends on the proportion of labor demand and supply. When considering the change of that supply, Smith focused on the change of population. Then, Smith did not presuppose the stability of labor supply or population. The change of population was incorporated into his theory of wages. Then, he considered the dynamics of equilibrium, the dynamics that points out how labor supply and demand change.

VI The dynamics of equilibrium and rent

Smith saw the natural rate of rent as influenced by the condition of land. In considering them, he incorporated his consideration on agriculture. Because rent is dependent on the condition of land and agriculture, its change is the long-term.

Among the production factors, rent is different from wages and profit of capital. Whereas the change of wages and profit results in that of the price of a commodity, the change of rent is resulted from that of the price. For rent is determined by the profit of agricultural products of land. Smith wrote, "the landlord endeavours to leave him no greater share of the produce than what is sufficient to keep up the stock from which he furnishes the seed, pays the labour, and purchages and maintains the cattle and other instruments of husbandry" (*WN*, I. xi. 1. 1). Unlike the physiocrates, Smith did not think of rent as the fee of the management of land. He said, "it is not at all proportioned to what the landlord may have laid upon the improvement of the land, or to what he can afford to take; but to what the farmer can afford to give" (*WN*, I. xi. 1. 5). This is because, unlike Locke, originally the property of land was resulted not from its cultivation or the addition of labor on it, but from the possession or occupation of land (*WN*, I. xi. a. 3). Thus, "the rent of land...is naturally a monopoly price" (*WN*, I. xi. 1. 5). Although labor is the measure of the value of rent, rent itself is not in proportion to the quantity of labor to cultivate and maintain land. Smith differentiated his labor theory of value with the social reality which was incompatible with the theory.

Then, Smith considered how rent is determined. Although rent is the cause of changing prices, it reflects the social condition. The natural rate of it was determined by its geographical position and its fertility (about the fertility, I shall argue later). He wrote, "land in the neighbourhood of a town, gives a greater rent than land equally fertile in a distant part of the country. Though it my cost no more labour to cultivate the one than the other, it must always cost more to bring the produce of the distant land to market" (*WN*, I. xi. b. 4). As a result, rent is lower in a distant place than near town. However, through the improvement of transportation such as canals, roads, and rivers, the cost of transportation from a distant place to town decreases to the similar level with places near town. The improvement improved cultivation. Thus, rent there becomes higher (*WN*, I. xi. b. 5).

The improvement of transportation is also beneficial for people in town. He wrote, "good roads, canals, and navigable rivers" introduces "some rival commodities into the old market, they open many new markets to tis produce. Monopoly, besides, is a great enemy to good management, which can never be universally established but in consequence of that free and universal competition" (*WN*, I. xi. b. 5). When considered the exchange of goods at a market, Smith presupposed the physical place of exchange. Because of this, he considered how the physical distance between a distant place and town is overcome, resulting in competition.

In addition to the physical distance, rent is determined by the fertility of land. On the one hand, the fertility is dependent on its physical situation. The difference of the fertility influences that of rent (WN, I. xi. b. 4). Especially, some regions are specifically suitable for cultivating some crops, the crops that people cannot cultivate in other regions. For instance, wine can grow in the ordinary land. However, some regions in France were specifically suitable for growing wine trees. Wine produced there was surpassed by the effectual demand. Because of this physical limitation, fine wine cannot be increased. Thus, the price of wine produced in these regions was very high. Rent there was also high (*WN*, I. xi. b. 27, 31). For another instance, sugar cane grows only in the West Indies. The effective demand of sugar surpassed its supply. The sugar colonies there earned a lot of profits and rents (*WN*, I. xi. b. 32). Not only these regional limitation, another limitation causes the increase of rent. Growing tobacco in Europe causes high tax, and tobacco agriculture was prohibited in the most countries of Europe. Thus, Thus, tobacco plantations in Virginia and Maryland enjoyed almost the monopoly. Thus, they earned a lot of profits and rents (*WN*, I. xi. b. 33). In this case, political regulation causes the high rent.

Except for the regional and political conditions, the fertility of land is dependent on how it is improved. before the improvement of agriculture, most of lands were uncultivated and used for taking domestic animals. Then, because the amount of meat surpassed that of bread, the price of meat was lower than that of grain (*WN*, I. xi. b. 7). However, after the improvement of land, because "a corn field of moderate fertility produces a much greater quantity of food for man, than the best pasture of equal extent" (*WN*, I. xi. b. 6), there produces a greater quantity of corn than meat. As a result, the rent and profit of pastoral land is regulated by those of corn. Although the price of meat there surpasses that of corn, to grow domestic animals requires four or five years. He wrote, "the inferiority of the quantity must be compensated by the superiority of the price. If it was more than compensated, more corn land would be turned into pasture; and if it was not compensated, part of what was in pasture would be brought back into corn" (*WN*, I. xi. b. 9).

As land is improved, there produces a lot of corn that surpasses the self-subsistence of its cultivator. By the surplus of corn, more people can be afforded. Thus, They use more and more land to supply materials for clothe and houses (*WN*, I. xi. c. 3). He wrote, "the desire of food is limited in every man by the narrow capacity of the human stomach; but the desire of the conveniences and ornaments of building, dress, equipage, and household furniture, seems to have no limit" (*WN*, I. xi. c. 7). As a result, demand for these goods as well as their supply increase (*WN*, I. xi. c. 7). As a result, as the cultivation of land for food increases, people demand not only more food but also more products land produces (*WN*, I. xi. c. 36). As land for producing materials for clothes and houses was limited, their value increases. Thus, rent for the land increases (*WN*, I. xi. d. 2).

Overall, rent is influenced by the distance and fertility of land. However, both, especially the latter, are dependent on how land or society in general improved. Before the improvement of land, rent for crops surpasses that for domestic animals. After the improvement of land, rent for crops becomes the standard of rent. However, as society develops, land to produce materials for clothes and houses becomes limited. Then, rent on it increases. Smith's dynamics of equilibrium here involves the improvement of society and agriculture.

VII The dynamics of equilibrium and the profit of capital

As wages and rent are influenced by how society is improved, the profit of capital is also influenced by this. When considering wages and rent, he did not consider how society is improved. By contrast, in studying profit, he considered the factors of limiting economic growth. If the limitation is broken, economy will grow.

The profit of capital is determined by economic growth. When one nation gets new territory or industry, the profit of capital increases. Because of the expansion of economy, "part of what had before been employed in other trades, is necessarily withdrawn from them, and turned into some of the new and more profitable ones. In all those old trades, therefore, the competition comes to be less than before" (*WN*, I. ix. 12). Smith illustrated this with "North America and the West Indies" (*WN*, I. ix. 12). Smith conceded that the establishment of colonies by emigration could be beneficial, although Smith was critical of the imperialism of Britain (*WN*, V. iii. 92).

Except for the change of the scale of society itself, in a country with the fixed territory, economic growth decreases the rate of the profit of capital. He said, "the increase of stock, which raises wages, tends to lower profit. When the stocks of many rich merchants are turned into the same trade, their mutual competition naturally tends to lower its profit" (*WN*, I. ix. 1). The low profit means the economic growth. Although merchants complained the high wages, the wages were the result of economic growth.

Here, Smith compared the high wages with the high profit. He wrote, "high profits tend much more to raise the price of work than high wages" (*WN*, I. ix. 24). On the one hand, "that part of the price of the commodity which resolved itself into wages would...rise only in arithmetical proportion to this rise of wages." On the other hand, "that part of the price of the commodity which resolved itself into profit, would...rise in geometrical proportion to this rise of profit" (WN, I. ix. 24). Whereas wages are in proportion to the quantity of labor, profit is in proportion to the amount of capital, not dependent on the quantity of labor and management the usage of capital requires (*WN*, I. vi. 6). Smith found out the uniqueness of capital different from wages and rent.

Unlike wages and rent, the rate of profit increases during the negative economic growth. For instance, in Bengal and other British East Indies, due to the decrease of capital, competition decreased. Thus, profit increased, whereas wages decreased (*WN,* I. ix. 13). He mentioned,

> In Bengal, money is frequently lent to the farmers at forth, fifty, and sixty per cent. and the succeeding crop is mortgaged for the payment. As the profits which can afford such an interest must eat up almost the whole rent of the landlord, so such enormous usury must in its turn eat up the greater part of those profits (*WN*, I. ix. 13).

Here, Smith referred to the contemporary debate whether the Indian people became misery due to the occupation of India by the East India Company. The instance provided Smith with the example of the effect of the negative economic growth.

On the other hand, in China, economic growth was almost zero, the rich could get the high profits, whereas the poor suffered from the low wages. On the one hand, whereas the rich enjoyed the protection of property, the poor did not so. The property of the poor was easily depraved by the officers. The oppression of the poor enabled the rich to establish the monopoly of industry the monopoly that resulted in the high profit. On the other hand, China ignored foreign trade. If China permit foreign trade fully, its economy would develop (*WN*, I. ix. 15). As a result, the political limitation resulted in the negative or zero economic growth.

In addition to the political limitation, Smith considered the natural limitation of economic growth. He wrote, "in a country which had acquired its full complement of riches...as the ordinary rate of clear profit would be very small," so the interest of money is "so low as to render it impossible for any but the very wealthiest people to live upon the interest of their money." By contrast, "all people of small or middling fortunes would be obliged to superintend themselves the employment of their own stocks." As a result, "it would be necessary that almost every man should be a man of business, or engage in some sort of trade. The province of Holland seems to be approaching near to this state" (*WN*, I. ix. 20). In this state, it becomes custom "not to be employed" (*WN*, I. ix. 20). Economic growth for Smith was not infinite. The economic growth reaches its peak when potentially available resources in land, production, and human resources are fully utilized. In that condition, people are more or less independent, not employed by others, whereas most capitalists cannot live on the profit of their capital. Smith saw the peak of economic growth as society with relatively equal and independent people.

Economic growth was conditioned by the new territory or industry and the political limitation such as the precariousness of property and the prohibition of foreign trade. If these limits are broken, economy will grow. However, economic growth also has its own natural limitation. Smith saw the limitation not necessarily as harmful but as useful for establishing relatively equal and independent society.

Overall, the production factors such as wages, rent, and profits cause the dynamics of equilibrium. Then, the dynamics is resulted from the change of social conditions. Then, the dynamics was caused by the improvement of society in industry, agriculture, and politics. Because this process of the improvement might take a long time, the dynamics happens in the long term. However, Smith saw the equilibrium and its dynamics as within one country. Smith also considered how to break the limit of economic growth, the limit that is also the restraint of equilibrium within one country. In this one-country model, Smith also presupposed the neutrality of money. When Smith considered how to break the limit of economic growth, he removed these prerequisite one by one.

VIII Money and the limit of equilibrium and money

When considering equilibrium and its dynamics, Smith basically presupposed the neutrality of money, the condition that also involves its own limit to economic growth. Through removing the conditions, Smith studied how to overcome the restraint of economic growth.

When considering his economic model of equilibrium and its dynamics, he presupposed the neutrality. Smith himself mentioned the condition of the neutrality in case of species. If demand for money is fixed, the increase of money supply does not have any effect but the increase of nominal prices. He wrote, "any increase in the quantity of silver, while that of the commodities circulated by means of it remained the same, could have no other effect than to diminish the value of that metal. The nominal value of all sorts of goods would be greater, but their real value would be precisely the same as before" (*WN*, II. iv. 11). Then, as nominal prices of things increase, nominal wages increase. However, real wages does no change, so workers can enjoy only the same amount of goods as before. In case of the profit of capital, both the nominal and real profits are the same as before. For the profits are "not computed by the number of pieces of silver with which they are paid, but by the proportion which those pieces bear to the whole capital enjoyed." As a result, for instance, "in a particular country five shillings a week are said to be the common wages of labor, and ten per cent. the common profits of stock. But the whole capital of the country being the same as before, the competition between the different capitals of individuals...would likewise be the same" (*WN*, II. iv. 11). Whereas wages are paid and determined before the sale of goods, the profits of capital are after the sale, and are in proportion to the whole capital, the proportion that does not change. As a result, in this case, people does not change their economic behavior in view of monetary fluctuations. In this case, the neutrality of money is applicable, and was presupposed when considering equilibrium and its dynamics.

On the other hand, when the supply of money as species is fixed, and demand for commodities increases, the value of the money increased. About capital, although the nominal value of capital is the same as before, the real quantity of capital increases. Because of the increase of the whole capital, competition increases, so the real and nominal rate of the profit decreases. About the labor, the same nominal quantity of the money dominates more labor and the product of labor than before. Because demand for the products of labor increases, demand for labor also increases. Because the real value of things increases, and the nominal value of them is fixed, the nominal value of things might decrease, so wages might decrease. However, this decreased wages enable workers to purchase more goods than before (*WN*, II. iv. 12). In this case, although money supply is fixed, the change of demand for money influenced nominal wages, and both nominal and real profits of capital. However, it's not the change of demand for money but the change of demand for commodities that influence economy. Here, also, Smith presupposed the neutrality of money, the neutrality that was the prerequisite of equilibrium and its dynamics. Then, what was presupposed was either the increase of money supply with the fixed demand for money, or the fixed money supply with the increase of demand for money.

Smith did not presuppose these two cases, and considered the effect of the change of both money supply and demand for money when he studied the historical fluctuations of economy. Then, Smith focused on the balance of money supply and demand for money. However this theory also presupposed money as species. In Book II, when considering the case of the Scottish contemporary bubble caused by the increase of paper money and credit, Smith did not presuppose the neutrality of money.

When considering paper money, he considered the role of money in people's revenue. He wrote, "the gross revenue of all the inhabitants of a great country, comprehends the whole annual produce of their land and labour; the neat revenue, what remains free to them after decucing the expence of maintaining; first, their fixed; and, secondly, their circulating capital" (*WN*, II. ii. 5). People earn their income by selling their products. Then, they have to reserve money for maintaining fixed capital such as machines and factories (*WN*, II. ii. 6), and circulating capital such as "money, provisions, materials, and finished work" (WN, II. ii. 6). Among the circulating capital, "the three last...are regularly withdrawn from it, and placed either in the fixed capital of the society, or in their stock reserved for immediate consumption" (*WN*, II. ii. 9). They are useful for production or consumption. However, "money...is the only part of the circulating capital of a society, of which the maintenance can occasion any diminution in their neat revenue" (*WN*, II. ii. 11). The circulation of capital encourages the production of commodities. Reserving money itself is not useful for the enhancement of the productive usage of capital. Smith saw money as the cost of circulating capital and goods.

Because of this, paper money is useful for the reduction of the circulating cost of money. He wrote, "when paper is substituted in the room of gold and silver money, the quantity of the materials, tools, and maintenance, which the whole circulating capital can supply, may be increased by the whole value of gold and silver which used to be employed in purchasing them" (*WN*, II. ii. 39). Thus, when considering paper money, the theory of money as species is not necessarily applicable.

Indeed, issuing paper money does not increase the amount of capital. However, the issue makes possible the more effective and productive usage of capital. For "that part of his capital which a dealer is obliged to keep by him umemployed...is so much dead stock" (*WN*, II. ii. 86). The replacement of gold and silver money with paper money makes this dead stock of money be used for other productive purposes of using capital. In this way, the replacement results in the increase of the circulation or velocity of capital. Certainly, even in this case, the supply of money as species is not changed. However, the increase of paper money encourages the flow of capital. It makes possible the change of dead stock of money to flow.

Overall, when Smith saw equilibrium and its dynamics as presupposing the neutrality of money as species, Smith did not consider paper money. Through considering paper money, he did not presuppose the neutrality of money. Paper money encourages the flow and velocity of capital. It's not the amount of money as species but the flow of money including paper money that influences economy. Here, money-neutral equilibrium is affected by the flow.

IX Foreign Trade and the limit of equilibrium

In addition to money, equilibrium and its dynamics was limited by one-country model. Through considering foreign trade, or international communication, Smith broadened his view of economy, and then found out the way of overcoming the limit of economic growth.

As I argued before (Section VII), Smith argued the limit of economic growth when studying the case of Holland. Holland utilized all social resources. Then, it faced the limit of economic growth. However, it was in the context of analyzing domestic usage of capital that he considered the limit. In this respect, the limit presuppose one-country model of economic growth. However, when studying foreign trade, he removed one-country model, as I argued in this section.

Certainly, he did not think of foreign trade as preferable to other usages of capital, when comparing the different usages of capital. Because subsistence and materials to produce is essential for manufacturing, agriculture should be the first object of investing capital (*WN*, II. v. 4). Second, the production of goods requires manufactures, so capital should be invested (*WN*, II. v. 5). Third, "unless a capital was employed in transporting, either the rude or manufactured produce, from the places where it abounds to those where it is wanted, no more of either could be produced than was necessary for the consumption of the neighbourhood" (*WN*, II. v. 7). Especially, this exchange was supported by wholesale merchants (*WN*, II. v. 10). Thus, investing capital in them is the third object. Fourth, the retailer saves the cost of selling from people they buy commodities (*WN*, II. v. 9).

Then, the third, whole sale merchants divided into three categories such as "home trade, the foreign trade of consumption, and the carrying trade." Home trade is the domestic trade. The foreign trade of consumption is "employed in purchasing foreign goods for home consumption. The carrying trade is employed in transacting the commerce of foreign countries" (*WN*, II. v. 24). The circulation of capital in the home trade is more rapid than that in the foreign trade of consumption. Thus, the former is more worth investing capital than the latter (*WN*, II. v. 27). Because the carrying trade requires far more time than the foreign trade of consumption, the carrying trade is the worst as the object of investing capital (*WN*, II. v. 29).

As a result, the foreign trade as the carrying trade is not preferable in the investment. Smith repeated this rank when he mentioned to his "natural progress of opulence" (*WN*, III. i). He wrote, "according to the natural course of things, therefore, the greater part of the capital of every growing society is, first directed to agriculture, afterwards to manufacture, and last of all to foreign commerce" (*WN*, III. i. 8).

However, this rank of investment does not mean that foreign trade should not be invested. This rank is applicable for a country where the social resources and capital is limited. The rank is useful for knowing how to encourage economic growth. This model is based on one-country development. However, as I argued before, Smith also faced the limit of economic growth when he presupposed one-country model. Then, to break the limit, foreign trade is useful. He wrote, "when the produce of any particular branch of industry exceeds what the demand of the country requires, the surplus must be sent abroad...Without such exportation, a part of the productive labour of the country must cease, and the value of its annual produce diminish" (*WN*, II. v. 33). Again, here, Smith faced the limit of economic growth by one-country model. Then, foreign trade is necessary for overcoming the limit.

Especially, foreign trade is different from other branches of capital investment. He wrote,

> The extent of the home-trade and of the capital which can be employed in it, is necessarily limited by the value of the surplus produce of all those distant places within the country which have occasion to exchange their respective productions with one another. That of foreign trade of consumption, by the value of the surplus produce of the whole country and of what can be purchased with it. That of the carrying trade, by the value of the surplus produce of all the different countries in the world. Its possible extent, therefore, is in a manner infinite in comparison of that of the other two, and is capable of absorbing the greatest capitals (*WN*, II. v. 36).

As a result, whereas other trades are limited by the regional demand and supply, the carrying trade is not limited by them. Thus, the carrying trade is infinite. Further, although the carrying trade takes much more time than other trades, it is useful for overcoming the limitation of one-model growth. As I argued before, when considering equilibrium and its dynamics, he presupposed the limitation of time and place. However, here, he removed the limitation. In the international interaction of people and goods, growth is limitless.

X Conclusion

When considering economic equilibrium, Adam Smith presupposed markets in his age. They were regional. Smith saw them not as non-regional abstract model. Through considering markets, he mixed the price theories with "self-regulating" mechanism, each of which his predecessors elucidated. However, this "self-regulating" market mechanism itself was sustained by the institutional framework to exclude monopoly and ascertain competition. Competition was sometimes not existent, so should be sustained institutionally.

Based on this institutional framework, markets open. In the short term, or at the market day, demand can be different from supply because supply cannot be changed. Then, the amount of demand determines the price. After the market day, or in the medium term, they go back to their home, and can change their production factors. Then, Smith presupposed the stability of the natural rates of wages, land, and profits in a society. Here, the equilibrium here is static. However, these three are produced or reproduced outside the market. Thus, when Smith studied the mechanism of each factor, he considered how the difference of society influenced that of the natural rates. Thus, in the long term, the natural rates of the production factors such as wages, rent, and profits are changed by the change of social conditions. The production factors such as wages, rent, and profits cause the dynamics of equilibrium. Then, the dynamics was caused by the improvement of society in industry, agriculture, and politics. Because this process of the improvement might take a long time, the dynamics happens in the long term.

However, Smith saw the equilibrium and its dynamics as within one country. Smith also considered how to break the limit of economic growth, the limit involves money and foreign trade. When reconsidering the theory of money including paper money, he found out how to break the limit of economic growth. Further, equilibrium also presupposed one-country model. Through considering foreign trade, he elucidated how to overcome the restraint of the growth. When a country faced the limit of growth, the final solution of growth is not his one-country model of economic growth arranged by his theory of the dynamics of equilibrium, but his theory of international interaction including money and trade.