## Nassau Senior

(1790-1864)

Nassau Senior was an important economist in the development of classical economics in Britain during the early 1800s. He was the son of a vicar and was educated at Oxford, where he was later a professor of political economy. He also served as a professor at Kings College, London, but was forced to resign when he advocated confiscating some of the revenues of the Established Church of Ireland which were devoted to the benefit of the Roman Catholics. He is now also known for advocating keeping a strict division between the science of economics and the art of economics, in which policy matters were discussed.

*His main work, from which this selection is taken, is* An Outline of the Science of Political Economy.

Nassau W. Senior. 1836 (1951). *An Outline of the Science of Political Economy*. New York: Augustus N. Kelly, pp. 13-17.

## Value and the Forces of Demand and Supply

Value defined.—Our definition of Wealth, as comprehending all those things, and those things only which have Value, requires us to explain at some length the signification which we attribute to the word Value; especially as the meaning of that word has been the subject of long and eager controversy. We have already stated that we use the word VALUE in its popular acceptation, as signifying that quality in anything which fits it to be given and received in exchange; or, in other words, to be lent or sold, hired or purchased.

So defined, Value denotes a relation reciprocally existing between two objects, and the precise relation which it denotes is the quantity of the one which can be obtained in exchange for a given quantity of the other. It is impossible, therefore, to predicate value of any object, without referring, expressly or tacitly, to some other objects in which its value is to be estimated; or, in other words, of which a certain quantity can be obtained in exchange for a certain quantity of the object in question.

We have already observed that the substance which at present is most desired, or, in other words, possesses the highest degree of value, is the diamond. By this we meant to express that there is no substance of which a given quantity will exchange for so large a quantity of every other commodity. When we wished to state the value of the king of Persia's bracelet, we stated first the amount of gold, and afterwards of English labour, which it would command in exchange. If we had attempted to give a perfect account of its value, we could have done so only by enumerating separately the quantity of every other article of wealth which could be obtained in exchange for it. Such an enumeration, if it could have been given, would have been a most instructive commercial lesson, for it would have shown not only the value of the diamond in all other commodities, but the reciprocal value of all other commodities in one another. If we had ascertained that a diamond weighing an ounce would exchange for one million five hundred thousand tons of Hepburn coal, or one hundred thousand tons of Essex wheat, or two thousand five hundred tons of English foolscap paper, we might have inferred that the coal, wheat, and paper would mutually exchange in the same proportions in which they were exchangeable for the diamond, and that a given weight of paper would purchase six hundred times as much coal, and forty times as much wheat.

Demand and Supply.—The causes which determine the reciprocal values of commodities, or, in other words, which determine that a given quantity of one shall exchange for a given quantity of another, must be divided into two sets[:] those which occasion the one to be limited in supply and useful, (using that word to express the power of occasioning pleasure and preventing pain),

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and those which occasion those attributes to belong to the other. In ordinary language, the *force* of the causes which give utility to a commodity is generally indicated by the word *Demand;* and the *weakness* of the obstacles which limit the quantity of a commodity by the word *Supply*.

Thus the common statement that commodities exchange in proportion to the Demand and Supply of each, means that they exchange in proportion to the force of weakness of the causes which give utility to them respectively, and to the weakness or force of the obstacles by which they are respectively limited in supply.

Unfortunately, however, the words Demand and Supply have not been always so used. Demand is sometimes used as synonymous with consumption, as when an increased production is said to generate an increased demand; sometimes it is used to express not only the desire to obtain a commodity, but the power to give the holder of it something which will induce him to part with it. "A Demand," says Mr. Mill, (Political Economy, p. 23, 3d edition), "means the will to purchase and the power of purchasing." Mr. Malthus, Definitions in Political Economy, p. 244, states that "Demand for commodities has two distinct meanings: one in regard to its extent, or the quantity of commodities purchased; the other in regard to its intensity, or the sacrifice which the demanders are able and willing to make in order to satisfy their wants."

Demand.—Neither of these expressions appears to be consistent with common usage. It must be admitted that the word Demand is used in its ordinary sense when we say that a deficient wheat harvest increases the Demand for oats and barley. But this proposition is not true if we use the word Demand in any other sense than as expressing the increased utility of oats and barley; or, in other words, the increased desire of the community to obtain them. The deficiency of wheat would not give to the consumers of oats and barley any increased power of purchasing them, nor would the quantity purchased or consumed be increased. The mode of consumption would be altered; instead of being applied to the feeding of horses, or to the supply of stimulant liquids, a certain portion of them would be used as human food. And, as the desire to eat is more urgent than the desire to feed horses, or drink beer or spirits, the desire to obtain oats and barley, or, in other words, the pleasure given, or the pain averted, by the possession of a given quantity of them or, in other words, the utility of a given quantity of them, would increase. A fact, which, in ordinary language, would be expressed by saying, that the demand for them was increased.

But though the vagueness with which the word Demand has been used renders it an objectionable term, it is too useful and concise to be given up; but we shall endeavour never to use it in any other signification than as expressing the utility of a commodity; or, what is the same, for we have seen that all utility is relative, the degree in which its possession is desired.

*Supply.*—We cannot complain of equal vagueness in the use of the word Supply. In ordinary language, as well as in the writings of Political Economists, it is used to signify the quantity of a commodity actually brought to market. The complaint is, not that the word Supply has been used in this sense, but that, when used in this sense, it has

been considered as a cause of value, except in a few cases, or for very short periods. We have shown, in the examples of coats and waistcoats, and gold and silver, that the reciprocal value of any two commodities depends, not on the quantity of each brought to market, but on the comparative force of the obstacles which in each case oppose any increase in that quantity. When, therefore, we represent increase or diminution of supply as affecting value, we must be understood to mean not a mere positive increase or diminution, but an increase or diminution occasioned by a diminution or increase of the obstacles by which the supply is limited.

Intrinsic and Extrinsic Causes of the Value of a Commodity.—To revert to our original proposition, the reciprocal Values of any two commodities must be determined by two sets of causes; those which determine the Demand and Supply of the one, and those which determine the Demand and Supply of the other. The causes which give utility to a commodity and limit it in supply may be called the <code>intrinsic</code> causes of its value; those which limit the supply and occasion the utility of the commodities for which it is to be exchanged, may be called the <code>extrinsic</code> causes of its value. Gold and silver are now exchanged for one another in Europe in the proportion of one ounce of gold for about sixteen ounces of silver. This proportion must arise partly from the causes

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which give utility to gold and limit its supply, and partly from those which create the utility and limit the supply of silver. When talking of the value of gold we may consider the first set of causes affect gold only so far as it is said to be exchanged for silver, which may be called one of its specific values; the aggregate of its specific values forming its general value. If while the causes which give utility to silver and limit it in supply were unaltered, those which affect gold should vary; if, for instance, fashion should require every well-dressed man to have all his buttons of pure gold, or the disturbances in South America should permanently stop all the gold works of Brazil and Columbia [the author means Colombia], and thus (as would be the case) intercept five-sixths of our supplies of gold, the reciprocal values of gold and silver would in time be materially varied. Though silver would be unaltered both as to its utility and as to its limitation in supply, a given quantity of it would exchange for a less quantity of gold, in the proportion perhaps of twenty to one, instead of sixteen to one. As between one another the rise and fall of gold and silver would precisely correspond, silver would fall and gold would rise one-fourth. But the fall of silver would not be general but specific; though fallen as estimated in gold, it would command precisely the same quantities as before of all other commodities. The rise of gold would be more general; a given quantity of it would command one-fourth more not only of silver, but of all other commodities. The holder of a given quantity of silver would be just as rich as before for all purposes except the purchase of gold; the holder of a given quantity of gold would be richer than before for all purposes.

The circumstances by which each different class of commodities is invested with utility and limited in supply are subject to perpetual variation. Sometimes one of the causes alone varies. Sometimes they both vary in the same direction; sometimes in opposite directions. In the last case the opposite variations, wholly or partially neutralize one another.

The effects of an increased Demand concurrent with increased obstacles to Supply, and of diminished Demand concurrent with increased facility of Supply, are well exemplified by hemp. Its average price before the revolutionary war, exclusive of duty, did not exceed £30 per ton. The increased Demand, occasioned by a maritime war, and the natural obstacles to a proportionate increase of Supply, raised it, in the year 1796, to above £50 a ton; at about which price it continued during the next twelve years. But in 1808, the rupture between England and the Baltic powers, the principal source of our supplies, suddenly raised it to £118 a ton, being nearly four times the average price in peace. At the close of the war, both the extraordinary demand and the extraordinary obstacles to the supply ceased together, and the price fell to about its former average.