

MPRA

Munich Personal RePEc Archive

Say's Law

Meacci, Ferdinando

University of Padova

June 2013

Online at <https://mpra.ub.uni-muenchen.de/55495/>

MPRA Paper No. 55495, posted 15 May 2014 17:09 UTC

SAY'S LAW¹

by

FERDINANDO MEACCI

University of Padova

Department of Economics and Management

Fax +39 049 8274221

Email: ferdinando.meacci@unipd.it

ABSTRACT

The expression *Say's Law* is used in the economics literature to represent the arguments set out by Say in Chapter XV, *Des Débouchés*, Book I, of his *Traité d'Économie Politique* (1st ed. 1803; 4th ed. 1819, 1st English trans. 1821). These arguments, later known and discussed under the different names of *loi des débouchés* and *Law of markets* are considered by Ricardo amongst the original, accurate, and profound discussions of an author who justly appreciated and applied the principles of Smith (Works I: 6-7). Ever since Say's exposition and Ricardo's appreciation, the focus and controversies on this Law reached two distinct peaks first in the classical and then in the post-Keynesian period. While the classical period, which run between James Mill's explicit draft of the Law (1965 [1808]) and J. S. Mill's final qualification of it (1929 [1871]), reached its own peak in Ricardo's outright support, against Malthus's criticisms, of those arguments, the post-Keynesian period was opened by Keynes's outright criticism of Ricardo's system of thought (believed to be based on Say's Law), and corresponding defence of Malthus, in his *General Theory* (CW VII: 18-21, 32-34, 364]). The different versions, interpretations and misunderstandings that have surrounded the Law in the course of time have been so numerous that an entire volume (be it one of those authored by Kates, 1998, Sowell, 1972, and Hutt, 1974; or the one edited by Kates, 2003) may not be enough to account for all of them. This holds even if the Law were looked at from the standpoint of a single author, be it Say or Ricardo, or of the interactions within, or between, the systems of thought of these or of many other authors. This entry is intended to single out, amongst these different versions, interpretations and misunderstandings, only those connected, directly or indirectly, with Ricardo's support of the Law. Thus the entry is divided into 5 sections. Section 1 is focused on the limits of the Law from the standpoint of its pure or abstract content and on why it should be more properly referred to as *Say's Principle*, while section 2 is focused on the split of the Law into its two forms known in the literature as *Say's identity* and *Say's equality*. The remaining three sections are instead devoted to an analysis of the main endorsements, criticisms and counter-criticisms that have surrounded the Law ever since Ricardo came to its support against Malthus, and until Keynes moved against it and, more generally, against Ricardo himself. Some brief conclusions are eventually provided in the final section.

¹ A draft of this paper has been submitted for publication in the *Elgar Companion to David Ricardo*, edited by H. Kurz and N. Salvadori, E. Elgar, forthcoming

The expression *Say's Law* is used in the economics literature to represent the arguments set out by Say in Chapter XV, *Des Débouchés*, Book I, of his *Traité d'Économie Politique* (1st ed. 1803; 4th ed. 1819, 1st English trans. 1821). These arguments, later known and discussed under the different names of *loi des débouchés* and *law of markets* are considered by Ricardo amongst the original, accurate, and profound discussions of an author who justly appreciated and applied the principles of Smith (Works I: 6-7). Ever since Say's exposition and Ricardo's appreciation, the focus and controversies on this Law reached two distinct peaks first in the classical and then in the post-Keynesian period. While the classical period, which run between James Mill's explicit draft of the Law (1805 [1808]) and J. S. Mill's final qualification of it (1829 [1871]), reached its own peak in Ricardo's outright support, against Malthus's criticisms, of those arguments, the post-Keynesian period was opened by Keynes's outright criticism of Ricardo's system of thought (believed to be based on *Say's Law*), and corresponding defence of Malthus, in his *General Theory* (CW VII: 18-21, 32-34, 364]).

The different versions, interpretations and misunderstandings that have surrounded the Law in the course of time have been so numerous that an entire volume (be it one of those authored by Kates, 1998, Sowell, 1972, and Hutt, 1974; or the one edited by Kates, 2003) may not be enough to account for all of them. This holds even if the Law were looked at from the standpoint of a single author, be it Say or Ricardo, or of the interactions within, or between, the systems of thought of these or of many other authors. This entry is intended to single out, amongst these different versions, interpretations and misunderstandings, only those connected, directly or indirectly, with Ricardo's support of the Law. Thus the entry is divided into 5 sections. While section 1 is focused on the limits of the Law from the standpoint of its pure or abstract content and on why it should be more properly referred to as *Say's Principle*, section 2 is focused on the split of the Law into its two forms known in the literature as *Say's identity* and *Say's equality*. The remaining three sections are instead devoted to an analysis of the main endorsements, criticisms and counter-criticisms that have surrounded the Law ever since Ricardo came to its support against Malthus, and until Keynes moved against it and, more generally, against Ricardo himself. Some brief conclusions are eventually provided in section 7.

1. *Say's Law* or *Say's Principle*?

Ever since Say proclaimed in his *Traité* that *it is production which opens a demand for products* so that *no product is no sooner created than it from that instant affords a market for other products to the full extent of its own value* and even after J. S. Mill provided his final support for

what was to be called Say's Law by arguing why all sellers are inevitably and *ex vi termini* buyers (1929, III.xiv; see also Skinner, 1967; Thweatt, 1979, Hollander, 2005, Ch.5), the debate on the true meaning and implications of the Law developed in a number of directions. This development was carried out without noticing, to begin with, that the term Law is rather a misnomer (Baumol, 1999: 202) for what should more properly be regarded as a *principle* (a term used sometimes by Ricardo himself) and should accordingly be called Say's Principle. This Principle has little to do with the more sophisticated sense in which Clower and Leijonhufvud used this term, in lieu of the old one, and extended its meaning from quantities *actually* purchased and prices *actually* paid to *expected* purchase prices and *planned* quantities purchased (1984: 149; italics added). The essential aim of Say's Principle, as set out by Say himself in his *Traité* as well as in his correspondence with Malthus, was rather to dissolve the appearances, and highlight the substance, of transactions between different individuals, sectors and nations, once looked at in the classical context of the division of labour and of its international trade extensions. These appearances emerge when money comes into the picture as a unit of account or medium of exchange (*numéraire*) with the only task of facilitating these transactions. When this occurs, the double exchange (of money for commodities, of commodities for money) experienced in everyday transactions must be distinguished from the ultimate exchange between commodities, or between commodities and labour, that lies *beyond* our practice, or is *hidden* from our view, of such transactions. This is how and why money was presented as a *veil* which, necessitated as it is by the division of labour, prevents us from discerning the reality of the production and circulation of national wealth. Say's Principle was therefore formulated, and must be regarded, as a *vérité de raison*, or abstract principle, which is true *in theory* and, more precisely, in *static* theory. As such, Say's Principle must be kept apart from all the extensions, deviations and contradictions it undergoes once we move from the realm of *vérité de raison* to the realm of *vérité de fait* (Meacci, 2014), i.e. to what is true *in practice* or, more generally, in *dynamic* theory or in *applied* economics. The issue as to whether Say's Principle is true in practice as well as in theory was tackled by Ricardo and Malthus when they either supported or challenged that Principle in the historic contexts of the stagnation of trade experienced after the Napoleonic wars as well as of the short-term versus long-term policy measures then advocated for coming to grips with that stagnation (Hollander, 1979: 514-535; see also 1997, Ch.12; and Peach, 1993: 131-43). This adds some extra weight to the conclusion that Say's Principle presents itself, and can be elaborated upon, as something that (in one sense) holds *out of time* as well as something that (in another sense) may fail *in time* (Hicks, 1976).

2. Say's identity or Say's equality?

The notion of money as a unit of account implies that money has no utility of its own and cannot, therefore, fail to be used but in the purchase of useful commodities, whatever their price. This notion is different from the notion of money as a *store of value* which was focused upon only much later, sometimes implicitly and sometimes in conjunction with the previous one, as for instance in Hayek's view of money as a *medium of exchange* (Garrison, 1984). These two notions of money lie behind the two macroeconomic extensions of Say's principle known in modern literature as *Say's identity* (turned by Lange 1942, after including money among the commodities exchanged, into *Walras's Law*) and *Say's equality* (Becker and Baumol 1952; Baumol 1977; 1999; *contra* Lange, see Clower and Leijonhufvud 1984 [1973]). Both the identity and the equality refer to what happens to aggregate supply and aggregate demand in a *period* of time or, more precisely, of *historical* time; i.e. in a period in which *ex-post* (or actual) identities may differ from *ex-ante* (or planned) equalities: while Say's identity implies both the notion of money as a unit of account and an *ex-post* view of the variations of economic magnitudes in a given period, Say's equality implies the notion of money as (also) a store of value along with an *ex-ante* view of these variations. The difference between these notions and views is what makes the equality between aggregate supply and aggregate demand to appear, in the former case, as a logical *necessity* (in that all useful commodities will inevitably find, in such circumstances, their *débouchés*) and, in the latter case, as a concrete *possibility* (in that commodities, however useful, may happen to be regarded from time to time as less useful than the storage of money). Moving from Say's identity to Say's equality amounts, therefore, to moving from one assumption, and the resulting conclusion, to another: while, within Say's identity, the conclusion is that no crises due to aggregate supply exceeding aggregate demand would ever occur; the corresponding conclusion, within Say's equality, is that such crises are always possible, regardless of whether they are reversible or not.

3. Ricardo between Smith & Say

After criticizing both Smith and Say (as well as defending the former from the latter's criticisms) on value and riches in chapter XX of his *Principles*, Ricardo comes to his famous endorsement of Say's principle in chapter XXI where he states that *productions are always bought by productions, or by services; money is only the medium by which the exchange is effected* (Works I: 291-2; see also Works IV: 17 and VI: 163-4). It is interesting to note, however, that Ricardo's endorsement of Say's principle goes here hand-in-hand with his criticisms of some related arguments by Smith in spite of the fact that *Smith all but enunciated Say's Law* (Baumol, 1977: 157). This *enunciation* included not only the notion of money as a unit of account (Say's

identity) but also the more sophisticated notion (implicitly shared by Ricardo) of saving equal to investment. This notion supports what may be called *Smith's identity* and leads to what may also be called -in agreement with what was argued above- *Smith's equality*. The movement from the one to the other proposition reflects a movement from what is a basic assumption of Smith's theory of capital (saving=investment) to the manifold phenomena that may either conform to, or deviate from, this assumption. While the saving=investment assumption is implicitly rendered by Smith's view of the man who would be *perfectly crazy* if he failed to *employ* all the stock which he commands, in procuring either present enjoyment or future profit (WN II.i.30) as well as by his even more famous statement that *what is annually saved is as regularly consumed as what is annually spent, and nearly in the same time too* (WN II.iii.18), the phenomena that may either conform to, or deviate from, *Smith's equality* may be assimilated to the discrepancies between changes in the *real* and changes in the *nominal* price of commodities (or in their *price in labour* and their *price in money*) discussed by Smith himself in one of his previous chapters (WN I.v). Accordingly, Smith might here strengthen Ricardo's endorsement of Say's propositions by arguing that, in consistency with the notion of money he starts from, any discrepancy between the annual *volumes* (as distinct from the *concepts*) of saving and investment is not to be taken into consideration *in* such a work as this (WN I.v.22), it being understood that this might well be in a different kind of work. By contrast, Ricardo's criticisms of Smith in the same chapter in which he provides his endorsement of Say's principle are not aimed at what has been called above *Smith's identity* and *Smith's equality* but at what Ricardo believes to be the inconsistency between these propositions, on the one hand, and Smith's arguments on the competition of capitals and falling rate of profit, on the other. While interpreting these arguments as envisaging a permanent increase of supply above the increase of demand, Ricardo seems to be misunderstanding the impact of competition of capitals within *particular* sectors -which would imply the oversupply of particular products- for its different impact in the economy as a *whole* -which would instead imply an increased demand for labour with the associated increase in wages and corresponding fall of profit (according to an inverse relationship which, however, was intended by Smith in a different sense than by Ricardo) (Meacci, 2006).

4. Malthus versus Smith, Ricardo & Say

The notion of money as a unit of account or medium of exchange, on which Say's identity and Say's equality are equally based, reappears in Malthus's *monetary* criticisms of these propositions (Sowell, 1972: 96; Cottrell, 1998) in spite of Lange's misleading interpretation (1942: 61) of a note in Malthus's *Principles* (Malthus 1986, Vol. 6: 260-1). For these criticisms are

implicitly based on Smith's identity, strengthened as it was both by Malthus's assertion that "no political economist of the present day can by saving mean mere hoarding" (ibid.: 32) and by Ricardo's equivalent assertion that "when we say that revenue is saved, and added to capital, what we mean is, that the portion of revenue, so said to be added to capital, is consumed by productive instead of unproductive labourers" (Works I: 151]). Malthus, however, parts company with Ricardo (as well as with Smith) when, shifting his analysis to the long run, he focuses on what might be called the second-round effects of an act of saving, i.e. on whether the increasing output resulting from the corresponding investment will be absorbed by an adequate demand. Malthus's negative answer is provided a number of times and in different ways both in his *Principles* and in his vast correspondence with Ricardo (see, for a comprehensive view, Hollander, 1997, Ch.11). At the roots of his criticisms are, first, his view of demand as the *will* and *power* to purchase (Malthus 1986, Vol. 5: 51ff) and, secondly, his idea that the will (and power) to purchase is destined to fall short of the power to sell (Malthus 1986, Vol. 6: 253ff and 317ff; see also Malthus's letters in Ricardo (Works VI: 131; and ibid: 168) on the difference between "necessaries of life" and "other commodities". Ricardo's counter-criticisms are developed at length in his correspondence as well as in his *Notes on Malthus*. They reach, however, a unitary climax in Ricardo's *Principles*, chapter XXI, the aim of which is to deny any pressure towards secular stagnation other than the one contemplated in his own view of the wage-profit inverse relationship in the context of diminishing returns to land.

These counter-criticisms can be summarized in at least three steps. One may be focused on the question, raised by Malthus (1986, Vol. 8: 33) as to whether a glut "may be general as well as particular, and not whether it may be permanent as well as temporary". A second step can be traced to Smith's observation (endorsed, albeit partly and for diverging reasons, by Ricardo and Malthus on the desire of food, which is limited by the "narrow capacity of the human stomach" versus the desire of "conveniences and ornaments" which "seems to have no limit or certain boundary" (Works I: 293 and Malthus 1986, Vol. 6: 320, respectively). The third step can in turn be traced to Smith's notions of productive and unproductive *labour* as distinct (in spite of Malthus's arguments in Book II of his *Principles*) from the notions of productive and unproductive *consumption* (identified in Malthus's language with unproductive "consumers").

As for his first counter-criticism, Ricardo's argument was 1st) that, in accordance with the coordination failures, miscalculations or disproportionalities admitted by Say himself (Jonsson, 1995) and leading to arguments based on "Say's equality" rather than on "Say's identity", "mistakes may be made and commodities not suited to the demand may be produced" throughout the economy (Works II: 305; see also Torrens on this "great practical problem" (1966 [1821]: 370ff)); and 2nd)

that, in the exceptional case of the general stagnation of trade the best thing to do is to adopt the (pre-Keynesian) advice to petition the King and to oblige the Government to supply the deficiency of the people (Works I: 307) . As for the second counter-criticism, this is based on Ricardo \'s idea that the will is very seldom wanting when the power exists and that the desire of accumulation will only change the objects on which the demand will exercise itself (Works VI: 133) . This counter-criticism may be extended by arguing that Malthus \'s view of the long-run effects of a process of accumulation is anchored to the short-run view of a given wage basket, as if the increasing supply resulting from such a process were to be exclusively confined to the goods (for instance corn) already existing in it. Ricardo \'s third counter-criticism can be eventually summarized by objecting that Malthus \'s arguments are based on a confusion between the *motives* for accumulation (a question not in dispute and its *consequences* in the economy as a whole (*ibid.*: 316, note 204); or between the origin of an act of saving= investment and its impact on the future blend of productive and unproductive consumption, including the composition of the wage basket (or wages fund) exchanged in the future market for labour (whether productive or unproductive).

5. Keynes & Malthus *versus* Ricardo & Say

The assumption of money as a unit of account or medium of exchange, which underlies the classical debate on Say \'s Principle (including the whole Ricardo-Malthus controversy) along with the quantity theory of money to which it belongs (Hollander, 1979, Ch.9), was replaced in the literature of the 20th century by the completely different notion of *money* as a *store of value*. The author who produced such a replacement in the context of what was intended to be a new system of thought was J. M. Keynes (CW VII]). He summarised the old doctrine as supply creates its own demand and attacked the whole of it as if this expression reflected the true meaning of that Principle, and as if this Principle were incompatible with any situation of recession or unemployment as well as with any policy aimed at overcoming it (Jonsson, 1997; Kates, 1997, 2005; Eltis, 2005). Thus Keynes started his overall criticism of Say \'s Principle and of its implications by stressing not so much the new assumption but the classical saving= investment identity as the corollary of the same doctrine (ibid.: 18-19) , rather than as a starting definition and corollary of the old assumption. As a result, and far from focusing on the compatibilities between the conclusions resulting from those different assumptions, Keynes launched an overall attack on previous authors, starting from Say and, in particular, from Ricardo who was said to be the tone-deaf to what Malthus was saying $\text{(ibid.: 32-34; 362-364)}$. What Malthus was saying, however, was not without the obscurities denied by Keynes himself when praising Malthus \'s unusual combination of the shifting picture of experience with the principles of formal thought (CW X: 108) . This

combination is required, as argued above, to place Say's Principle in its proper context of *vérité de raison* as distinct from *vérité de fait*. Yet this is what is lacking in Malthus's arguments as well as what escapes Keynes's attention while endorsing those arguments. When arguing, for instance, that Smith's propositions on saving (Smith's identity) are true to a great extent though not to an indefinite extent Malthus (1986, Vol. 5: 9) seems to imply that Smith's identity, however true *in theory*, may be untrue *in practice*, i.e. in the context of the shifting picture of experience. Yet, after basing most of his arguments against Say's Principle on the great practical question of Works IX: 10) of rapid or sudden changes of saving, or of an inordinate passion for accumulation, i.e. on *actual* deviations from that principle, Malthus ends up by stressing the necessity for a country to possess a permanent body of unproductive consumers (see, for instance, *ibid*, Vol. 6: 317ff and p.329ff; CW X: 99); and by implying, therefore, that Smith's identity is untrue *even* in theory. Which is what Ricardo objects to when, after admitting the possibility of a general glut, he calls for (in the pre-Keynesian passage quoted above) an *ad hoc* government intervention rather than Malthus's body of unproductive consumers as such.

6. Concluding remarks

The different (but compatible) views of Say's Principle (in its two forms of Say's identity and Say's equality) as something that is true *in theory* but may be untrue *in practice*, as well as the different (but compatible) notions of money as a *unit of account* and of money as a *store of value*, underlie the inter-temporal debate that developed on that Principle in the context sometimes of *static* and sometimes of *dynamic* theory; and, within the latter, sometimes of the theory of *growth* and sometimes of the theory of *fluctuations*. This bifurcation of the literature, after ramifying for over two centuries in a variety of different interpretations and extensions, has beclouded the whole debate on Say's Principle to such an extent that it has become harder than ever to disentangle one issue from another, or to trace the different issues to the different systems of thought in which they have been, or should be, framed. Thus, far from coming to an end, the debate has become more far-reaching today than it was in the classical period. An important reason may be detected behind the lines of Schumpeter's final assessment of the debate. After arguing (against Keynes) that it would be more natural not to object to Say's law just as we do not object to the law of gravitation on the ground that the earth does not fall into the sun Schumpeter (1954: 624) ends up by introducing the most general question resulting from the debate. This is the question as to whether it is the Keynesian theory or (as Keynes believed) the classical theory that represents a *special* case; or, to put it differently, as to whether it is the study of the *obstacles* to full employment or the study of the *causes* of employment as such that must lie at the core of economic analysis. It is unfortunate that

Schumpeter, after hinting at this crucial question in a footnote added to the passage quoted above, eventually failed to tackle it at length either at the end, or in the spirit, of his brilliant account of the debate:

“A man of the name of J. B. Say had discovered a theorem of considerable interest from a theoretical point of view that, though rooted in the tradition of Cantillon and Turgot, was novel in the sense that it had never been stated in so many words. He hardly understood his discovery himself and not only expressed it faultily but also misused it for the things that really mattered to him. Another man of the name of Ricardo understood it because it tallied with considerations that had occurred to him in his analysis of international trade, but he also put it to illegitimate use. Most people misunderstood it, some of them liking, others disliking what it was they made of it. And a discussion that reflects little credit on all parties concerned dragged on to this day when people, armed with superior technique still keep chewing the same old cud, each of them opposing his own misunderstanding of the 'law' to the misunderstanding of the other fellow, all of them contributing to make a bogey of it” (Schumpeter 1954: 624-5).

FERDINANDO MEACCI

REFERENCES

- Baumol, W. (1977). Say's (at Least) Eight Laws, or What Say and James Mill May Really Have Meant, *Economica*, 44:2, pp.145-151
- (1999). Retrospectives: Say's Law, *Journal of Economic Perspectives* 13:1, pp.195-204
- Becker, G., and W. Baumol (1952). The Classical Monetary Theory, *Economica*, 19:4, pp.355-366
- Clower, R. W. and A. Leijonhufvud (1984 [1973]). Say's Principle, What It Means and Doesn't Mean, in D.A. Walter (ed.), *Money and Markets. Essays by Robert W. Clower*, Cambridge: Cambridge University Press, pp.145-165
- Cottrell A. (1998). Keynes, Ricardo, Malthus and Say's Law, in J. C. W. Ahiakpor (ed.), *Keynes and the Classics Reconsidered*, Dordrecht: Kluwer, pp.63-75
- Eltis W. (2005). Money and General Gluts: The Analysis of Say, Malthus, and Ricardo, *History of Political Economy*, 37:4, pp.661-688
- Garrison R. W. (1984). Time and money: The universals of macroeconomic theorizing, *Journal of Macroeconomics*, 6: 2, pp.197-213
- Hicks, J. R. (1976). Some Questions of Time in Economics, in A. M. Tang, F. M. Westfield, and J. S. Worley (eds), *Evolution, Welfare, and Time in Economics*. Lexington MA: Lexington Books, pp. 135-51
- Hollander, S. (1979). *The Economics of David Ricardo*, Toronto: University of Toronto Press
- (1997). *The Economics of Thomas Robert Malthus*, Toronto: University of Toronto Press
- (2005). *Jean-Baptist Say and the Classical Canon in Economics*, London: Routledge
- Hutt W. H. (1974). *A Rehabilitation of Say's Law*, Athens: Ohio University Press
- Jonsson P. O. (1995). On the Economics of Say and Keynes's Interpretation of Say's Law, *Eastern Economic Journal*, 21, pp.147-155

- (1997). On Gluts, effective Demand, and the True Meaning of Say's Law, *Eastern Economic Journal*, 23:2, pp.203-218
- Kates S. (1997). On the true meaning of Say's law, *Eastern Economic Journal*, 23:2, pp.191-203
- (1998). *Say's Law and the Keynesian Revolution: How Macroeconomic Theory Lost its Way*, Cheltenham: E. Elgar
- (ed.) (2003). *Two Hundred Years of Say's Law. Essays on Economic Theory's Most Controversial Principle*, Cheltenham: E. Elgar
- (2005). Supply Creates its Own Demand: A Discussion of the Origins of the Phrase and of its Adequacy as an Interpretation of Say's Law of Markets, *History of Economics Review*, 41, pp.49-60
- Keynes J. M. (1973). *The Collected Writings of John Maynard Keynes*, edited by D. Moggridge, London: Macmillan, 25 Vols
- Lange, O. (1942). Say's Law: A Restatement and Criticism, in O. Lange, F. McIntyre, and T. O. Matema (eds), *Studies in Mathematical Economics and Econometrics: In Memory of Henry Schultz*, Chicago: University of Chicago Press, pp. 49-88
- Malthus T. R. (1986). *The Works of Thomas Robert Malthus*, edited by E. A. Wrigley and D. Souden, London: Pickering, 8 Vols
- Meacci F. (2006). The competition-of-capitals doctrine and the wage-profit relationship, in N. Salvadori (ed.), *Economic Growth and Distribution: On the Nature and Causes of the Wealth of Nations*, Cheltenham: E. Elgar, pp.58-74.
- (2014). From bounties on exportation to the natural and market price of labour: Smith versus Ricardo, *The European Journal of the History of Economic Thought*, forthcoming, pp. 1-29
- Mill J. (1965 [1808]). *Commerce Defended*, New York: A. M. Kelley
- Mill J. S. (1929 [1871]). *Principles of political economy with some of their applications to social philosophy*, edited by W. J. Ashley, London: Longmans
- Peach T. (1993). *Interpreting Ricardo*, Cambridge: Cambridge University Press
- Say, J.-B. (1821), *A Treatise on Political Economy, or the Production, Distribution, and Consumption of Wealth*, translated by C. R. Prinsep on the fourth (1819) French edition, Boston: Wells and Lilly
- Schumpeter J. A. (1954). *History of Economic Analysis*, London: Routledge
- Skinner A. S. (1967). Say's Law: Origins and Content, *Economica*, 34:134, pp.153-66
- Smith A. (1976 [1776]). *An Inquiry into the Nature and Causes of the Wealth of Nations*, edited by R. H. Campbell and A. S. Skinner, Oxford: Oxford University Press, 2 Vols
- Sowell T. (1972). *Say's Law: An Historical Analysis*. Princeton: Princeton University Press
- Thweatt, W. O., (1979). Early Formulators of Say's Law, *Quarterly Review of Economics and Business*, 19:4, pp.79-96
- Torrens R. (1966 [1821]). *An Essay on the Production of Wealth*, New York: A. M. Kelley