European imbalances: financial or structural? Lessons from Neapolitan and English economists in the early XVII century.

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1. Euro imbalances: then and now.

Two main interpretations have been put forward of European countries' current external imbalances¹.

The first interpretation focuses on monetary and financial integration, pointing to rising capital flows as a result of : (1) monetary unification in Euro-area (EA) countries, and (2) legislation liberalising cross-border activities of financial firms in the European Union and the world as a whole². The EMU provided adhering countries with a new institutional framework and a new technology of international exchanges, including the basic means of payments (the euro) and the inter-bank payment system for settling cross-border payments within the EA itself (the so-called TARGET 2 system³). Financial liberalisation provided new opportunities for profit in cross-border intermediation, and financial operators where quick to exploit them. Taken together, these two factors incentivised capital flows by reducing transaction costs and interest rate differentials, abolishing the exchange rate risk, and affecting the market perception of country-specific risks. This first interpretation was initially framed in terms of a virtuous process of neoclassical conditional convergence, made possible by the integration of financial markets, as capital flew from rich countries in the North in order to exploit higher profit opportunities in poorer Southern European economies (Blanchard and Giavazzi, 2002).

The present paper builds on Costabile (2015) and Costabile (forthcoming).

¹ A third line of thought stresses fiscal discipline/indiscipline in the "virtous" Northern countries and the "vicious" Southern countries respectively. However, this interpretation does not stand up to closed scrutiny, as some of the "crisis countries" (Spain and Ireland) were running fiscal surpluses before the crisis hit, and their public debt accumulated only later, as a result of governments' bailing-out the private sector.

 2 Constancio showed that an index of total exposure of banks from "non stressed countries" in the EA to "stressed countries" went from 100 in the base year (1999) to more than 500 in 2007, and collapsed afterwrds.

³ I.e. the Trans-European Automated Real-time Gross Settlement Express Transfer system.

Attention subsequently shifted to "bad imbalances" (Eichengreen, 2010) and to less benign features of financial integration, such as the sharp increase in cross-border bank activity after the introduction of the euro, leading to the explosion of private debt in several peripheral countries and, later, to "sudden stops" and capital reversals when the global crisis erupted in 2007. As an example of this interpretation we may recall what the Vice-President of the ECB Vítor Constancio said in 2013: "It is my contention that the main driver of the crisis was located in the financial sector, particularly banks which intermediated large capital flows towards the periphery, creating imbalances that became unsustainable when a sudden stop occurred following the international crisis and the abrupt revision of price of risk that it entailed."

The second interpretation focuses on some asymmetric features of Europe's real economies, with emphasis on such factors as price competitiveness differentials between core and periphery countries. For instance, in 2011 Jean Paul Trichet, then President of the ECB, put the matter in the following terms: "Countries with large current account deficits or worsening current account balances, for example, often exhibit cumulated losses in price competitiveness, and vice versa, which again, in turn may be related to price and cost developments that are not economically justified." Within this line of thought, responsibilities are shifted back and forth between peripheral countries, accused of lax wage and price policies, and core countries accused of "mercantilist" practices intended to damage other European partners via excessive wage moderation and real exchange rate depreciation. Evolution within the "real approach" to European imbalances has also occurred: while early formulations emphasised pure price competitiveness, more recent contributions refer to deeper structural factors to explain diverging trade developments, such as the inhomogeneous sectoral composition of output, and different export specialization, between successful economies and those European countries that have suffered most from the crisis. Germany, it is argued, was in a better position to respond to external shocks, such as the rising demand for machinery and equipment from emerging countries including China. Thanks to its better product mix, Germany increased its exports and market shares in these countries, while other European countries suffered from the excessive weight of traditional sectors in the composition of their GDPs (Chen et al. 2013).

Thus, we are now confronting a broad division between a monetary/financial and a real/ structural interpretation of the causes of the current European balance of payments disequilibria. These interpretations are not alternative, as is natural to expect given the interplay of the many complex factors at work in the current crisis. Nevertheless, they reveal a difference

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in emphasis, respectively, on causes originating in the financial side of the economy, and those rooted in its real side.

The present paper goes four centuries back in history to show that economists at that time were not only discussing the same issue – balance of payments disequilibria in Europe; they also divided themselves along very similar lines, some of them blaming the perverse operation of the monetary and financial systems in the context of rising financial integration, and others emphasising the competitiveness - or lack thereof- of real economies, both in terms of price competitiveness and with reference to the product mix. I report on two controversies that flared up respectively in the Kingdom of Naples at the first decade of the Seventeenth century, and in England in the second decade. These controversies are strikingly similar between themselves, and also to the current controversy.

The disputant were, in Naples, Marc'Antonio De Santis, Antonio Serra and Gian Donato Turbolo; in England, Gerard de Malynes, Edward Misselden and Thomas Mun.

These economists diverged as to the causes of the drain on metallic money experienced respectively in Naples and in England and, consequently, of the severe liquidity constraints biting on economic activity ("the scarcity of money" problem). But, because they correctly linked the money supply with the balance of payments, they converged in developing a useful accounting framework for open monetary economies. From this, they went on proposing their alternative theoretical explanations of external imbalances.

This paper illustrates the transnational network of virtual theoretical alliances emerging from this literature. The similarities cut across nationalities: to explain international disequilibria, De Santis and Malynes described in similar terms the complex technology of international exchanges operating in Europe, the structure of financial markets, and their distorting effects on exchange rates, terms of trade, cash flows and the money stock. By contrast, Serra, Mun and Misselden underlined the real/structural determinants of an active current account balance, such as price and non price competitiveness, the product mix, export specializations, and import and export elasticities.

As hinted at above, all the disputants accepted a basic accounting framework. However, for reasons to be explained below, the Neapolitans had a clearer vision of the complexities of the money flows connecting open economies. Section 2 illustrates the similarities and the differences between their respective accounting frameworks. Heated controversies, both in Naples and in London, concerned the way the monetary and real side of the economy should be integrated in a comprehensive conceptual architecture, and how the macroeconomic variables were related to financial markets and the structure of production. These controversies are illustrated in the next two sections. More specifically, section 3 investigates the links connecting the balance of payments to the operation of financial markets in the works of De Santis and Malynes, while section 4 illustrates the links between external equilibrium, competitiveness, and the sectorial composition of output described by Misselden, Mun and Serra. This section also includes a summary of Turbolo's original position. Section 5 concludes.

2. Open monetary economies: the accounting framework.

The protagonists of our story wanted to help remedy the "great scarcity of cash" affecting their economies, a problem well documented by both contemporary documents and historical studies (e.g. De Rosa, 1987: 95-8; Muldrew, 1998: 100)⁴. Consequently, they became interested in the macroeconomics of open monetary economies and, more specifically, in the links between the balance of payments and the money supply.

The money supply is linked to the balance of payments because any external imbalance must be settled in money – a task performed through specie flows under the monetary arrangements of their time, and with movements in international reserves under our modern international monetary system. In modern parlance, money flows out of the country whenever the balance of payments (i.e. the sum of the current account balance plus the capital account balance plus the non-reserve component of the financial account balance) is less than zero.

It was precisely the experience of monetary drains that led these economists to develop their analyses of the balance of payments and the related accounting framework, which they correctly framed in terms of the specie flows between the national economy and the rest of the world. In their accounting systems, both the English and the Neapolitan writers presented listings of the relevant items. However, while the former put their emphasis on imports and exports of goods and services, the Neapolitans went further, including a wider range of items in the current account, such as factor income receipts (profits and rents) and net unilateral

⁴ The reader is referred to the relevant literature for the historical and institutional context. For the English context see, among others, Johnson (1933); Gould (1955); Muchmore (1969;1970); Gomes (1987); Wennerlind (2001). For the Neapolitan side, see Fornari (1879); Colapietra (1973); De Rosa (1955;1987;1995); Calabria (1991); Galasso (1994); Villari (2013). For the international financial context, see the two classics: de Roover (1974) and Neal (1990).

transfers; moreover, they investigated international capital movements in what we now call the financial account more thoroughly than their English counterparts.

Serra and De Santis had reason to, and did in fact, disagree on the numerical value of the merchandise account, which was in substantial surplus according to De Santis, but was balanced, or showed at most a small surplus in Serra's opinion (Serra, 1613: 150-1). However, they both recognised the other items in the current account, and agreed on their negative sign.

Firstly, huge amounts of money left the country as "unilateral transfers" in the form of taxes and "donations" to the Spanish Monarchy and, to a lesser extent, as remittances to Rome. Secondly, the "factor income receipt" item was negative as a consequence of the "income from investments and profit from businesses that foreigners receive in the Kingdom" (Serra, 1613: 230-1; 204-5; see also De Santis, 1605a:136; Turbolo, 1629: 304; 317). In 1619, Turbolo estimated the amount of rents paid to foreigners at two million *ducati* per year (Turbolo, 1629, p. 354). The foreign *rentiers* were mostly Genoese businessmen, the traditional bankers of the Hispanic monarchy, which rewarded them for their services with unique opportunities for profits in many commercial and financial activities, both in the private and in the public sector (Serra, 1613:150-1). In the public sector these Genoese operators mostly profited from the mortgaging of future public revenues⁵. This made for the "vicious circle of indebtedness", which burdened both the central Neapolitan government and the municipalities (Calabria, 1991:51). Serra denounced the crushing weight of this immense debt, which multiplied "by the hour" (Serra, 1613:104-105; 150-1).

As for the financial account, the Neapolitan economists included foreign investments in their accounting framework. Serra correctly considered them as an item with a positive sign, though he deemed them able to offset only a minimum portion of the deficit items on the current account (ibid.:152-3). In this connection, he went beyond mere accounting to theoretical propositions, explaining these capital inflows as a function of the positive interest rate differential between domestic and foreign interest rates (ibid.:136-7). De Santis, who also took foreign investments into account, was pessimistic about their effects, stressing the other side of the coin, namely the profit and rent payments owed by the country to foreign investors, who "suck the blood of all the private citizens in the Kingdom". Moreover, he denounced the negative consequences of sudden stops and reversals when direct investment opportunities were exhausted (De Santis,1605a:136; 1605b: 147), or when financial speculation took them away

from the country. In this connection, he investigated short term speculative capital flows. This phenomenon, it must be added, was also considered by Malynes. We will go back to this point in section 3.

Having offered fairly complete listing of the relevant items (Benini, 1892: 232), the Neapolitans correctly concluded that specie outflows had to make up not only for the current account, but for the total external deficit. By contrast, the English writers blamed specie outflows mostly on the trade account imbalance. As Mun said: "...we lose those monies only which are made of the over-balance of our general trade, that is to say, that which we spend more in value of forraign wares, than we utter of our own commodities" (Mun, 1664: 42; also 9-10;12; 83-4). True, he added some minor remittances to Rome by local priests and Jesuits, as well as gifts to Ambassadors and other foreigners to the current account balance (Mun, 1664: 85), thus showing some awareness of the "unilateral transfer payment" item. But, all in all, the English economists were lucky enough to have very limited experience of taxes and rents to be paid abroad. As for capital flows, they referred to neither inward nor outward foreign investment. They may have disregarded them on account of the fact that foreign investments at the time were "meagre" (Blitz: 50), and did not affect sovereign powers, while, as we have seen, they had strong impact on the unlucky Neapolitan province of the Spanish empire.

Thus, there is an interesting difference between the two groups of economists, reflecting the historical circumstances of their respective homelands: the Neapolitan Kingdom was a dependent economy, and for this reason it was open to foreign investment, both of the direct and the financial variety, both in the private and in the public sector; consequently, it was burdened with taxes and rents to be paid abroad. By contrast, the English writers lived in an independent economy connected to the rest of the world almost exclusively through trade and war. The Neapolitan economists paid a high cost – fraught with long-lasting consequences for Southern Italy's future history – for their superior understanding of the complexities of the balance of payments.

These differences notwithstanding, the Neapolitan and the English economists had the same accounting framework in mind, registering with a negative sign all the items generating money outflows, and with a positive sign all inward payments. While the specific items that they registered in their accounting systems testify to their awareness of the factual conditions of their respective countries, the emergence of a common accounting framework interestingly illustrates the supranational characteristics of political economy in the early stages of its formation.

⁵ Thanks to this financial expedient, the administration was able to secure a lumpsum equal to the current discounted value of a series of future incomes, (e.g. the revenues from a tax). The mortgaging of future public revenues lead to the creation of a Government bond market in the second half of the Sexteenth century (Calabria, 1991: 52; 104-129).

Going on, now, from accounting frameworks to theoretical explanations, let us look at the transnational network of virtual interpretative alliances emerging from these two controversies.

3. Malynes and De Santis: the no-silver-flow condition, financial markets and the "abuse of the exchange".

Gerard De Malynes (fl.1583–1641) and Marc'Antonio De Santis (fl. 1596-1605) blamed the scarcity of cash on the system of international payments, which was based on the coexistence of two distinct financial instruments, namely metallic money and letters (or bills) of foreign exchange. Due to the practices of foreign exchange dealers, they argued, the exchange rate set in the market for letters of exchange was made independent of the metallic parity and thus diverted from its equilibrium level, stimulating destabilising international flows of metallic money⁶.

Some introductory remarks are necessary in order to understand the similarities and differences between their respective arguments.

Firstly, London and Naples usually quoted the exchange rate in different ways: in London, it was commonly defined as the variable amount of foreign currency per *pound sterling*, according to the practice by which London had "the head of the exchange" with many markets in Northern Europe, especially the Low Countries⁷. By contrast, in Naples the exchange rate was quoted as the price of the foreign currency in terms of the domestic currency, i.e. the units of *carlini* that Neapolitan citizens had to give up for a unit of the foreign currency. Consequently, when Malynes complained about an exchange rate that was too low, and De Santis about an exchange rate that was too high, they meant the same thing, namely a depreciated national currency: English tradesmen, said Malynes, were receiving too few foreign coins, e.g. Dutch *florins*, for a *pound*; the Neapolitans, said De Santis, were paying too many *carlini* for, e.g., a Florentine *florin*. Both statements meant that the external value of the domestic currency was below what they regarded as its equilibrium level.

Secondly, according to a common continental practice, the Neapolitans usually quoted the exchange rate in terms of an international *numéraire* or money of account⁸: the gold *écu* or *scudo d'oro* in use in the "Bisanzone fair" (actually held in Piacenza). Obviously, once each currency was quoted in terms of a common international *numéraire*, bilateral exchange rates between any two currencies were also determined. Thus, the 'aerial exchange rate', as De Santis called it (1605a:114), was the price of the Piacenza gold *écu* in units of Neapolitan *carlini*, or in other subdivisions and multiples of the national currency: a *carlino* was equal to 10 *grana*, and to 1/10 of a *ducato*. By contrast, Malynes considered the exchange rate between currencies in actual circulation, without reference to any international *numéraire*⁹.

Finally, and most importantly, economic operators had access to two alternative means of international payments: silver coins and letters (or bills) of exchange. For instance, a Neapolitan (English) merchant could either send cash abroad, or alternatively pay cash for a bill of exchange entitling him/her to a given amount of the foreign currency in the foreign market, e.g. *florins* in Florence (in Amsterdam). The foreign currency was readily available, because the exchange dealer had a correspondent in Florence (Amsterdam), whom he instructed to pay the merchant the amount of *florins* corresponding to the exchange rate stipulated in the contract. In some cases the merchant, in Naples or in London, did not have to pay out cash immediately for the letter of exchange, but obtained it on credit. This added an interest payment to the exchange rate transaction, which Malynes brought attention to, arguing against the usury element that foreign exchange dealers hid under the appearance of compensation for "discrepancies and distances of time and place" (Malynes,1601:32).

With these provisos in mind, let us look at the logic of our two authors' arguments, which came in four steps.

As first step, they defined the equilibrium level of the nominal exchange rate (dubbed "fair" by De Santis, and "right" by Malynes) as the level at which the flow of the precious metals between countries would come to a halt. According to Malynes, the equilibrium exchange rate would be given by the *Par pro Pari* or *value for value* condition, i.e. by the mint parity between national and foreign currencies, account being taken of their respective weight

⁶ Reference was mainly to silver coins when they mentioned metallic money. Gold was costly, and hence almost absent from both the domestic and the intra-European circulations. Thus a shortage of silver impacted strongly on the domestic circulation (Muchmore, 1970: 498).

⁷ Malynes (1601:28-9) gave a clear definition of the concept: "the head of the exchange is taken to bee [*sic*] at such a place or places where the price doth not alter, as for example: We have the head of the exchanges with Hamborow, Middleborough, Emden, Amsterdam...And on the contrarie, for as much that the price for Roan, Paris and other places in France, and for Venice, and other places in Italie or elsewhere, doth for time to time alter with us according to their Crowne or Ducat, therefore does the head of those exchanges rest with them".

⁸ It was common practice on the continent to use as *numéraires* "imaginary moneys", i.e. money that either had never existed, or had been out of circulation for centuries. On imaginary moneys see, Bloch (1954).

⁹ The system of quoting the sterling pound in imaginary *écus* had been in use in London in the Middle Ages, too (De Roover, 1974, p.186).

and fineness (Malynes (1601:14-15)¹⁰. De Santis incorporated into the fair rate of exchange some consuetudinary and legal elements, such as the exchange rate ruling in recent years and the quotations fixed by the monetary authority: consequently, in his view the *equilibrium* exchange rate could deviate somewhat from strict metallic parity¹¹. The two essential points are that for both authors the equilibrium exchange rate represented the "no-silver-flow condition", as we may call it; and that any deviation of the exchange rate from its equilibrium level would generate specie movements: a depreciated national currency would lead to export of metallic coins, while, on the contrary, specie would come into the country following appreciation (Malynes, 1601:34-5;1622:14-15; De Santis, 1606a:138-140).

"To avoide the cariage of money, a certaine exchange was devised, grounded upon the weight, fineness and valuation of the money of each country, according to value for value", said Malynes (1601:14).

De Santis added specific numbers to his definition:

"The fair price of the gold scudo at the exchange, people should know, is 130 [grana] (...). Therefore, the exchanges which the Kingdom makes with the markets in Italy, and these with it, at the said fair price of 130, determine that no hard cash comes into the Kingdom, and at the same time that the cash that is in the Kingdom stays in it, and does not go out. Changing at a price higher than the said fair price entails not only that no cash comes into the Kingdom, but also that all that is in goes out; changing at a lower price than the said fair price

brings an uncountable amount of cash into the Kingdom, and at the same time keeps it inside" (De Santis, 1605a:132).

The second step taken by our authors was to establish the reasons why the actual exchange rate often diverged from its equilibrium ("fair" or "right") level. Both blamed the divergence on the operation of the market for letters of exchange, although they both recognised that, if properly used, these instruments could prove useful in international trade. "The right use of the exchange", said Malynes, "is very needfull and convenient" (1601: 55); consequently, he had no objections to the "permutation" of foreign commodities "for our money" (ibid.: 89), but only if and when trade occurred at the "due course of the exchange rate" (ibid.:35). In the same vein, De Santis defined an exchange operation as "a permutation of money that is given in one place to receive the fair amount of currency in another" (1605:130). Thus, what the two authors objected to was not the use of these financial instruments, but "the abuse of the exchange". They both conceived that under the circumstances of perfectly competitive markets the forces of demand and supply would bring the actual exchange rate into equality with the equilibrium exchange rate (Malynes, 1622: 14-5 and 28; De Santis, 1605:138-9). But, they argued, under the current circumstances the foreign exchange dealers exploited some degree of market power in the market for letters of exchange. Ultimately this was a microeconomic problem, which lay in the oligopolistic structure of the financial markets, which allowed the exchange dealers ("bankers" for Malvnes, "negotianti" for De Santis) to collude and set the price for these letters as high as possible, as is in the interest of any oligopolistic seller.

In this connection, Malynes contented himself with blaming the heads of the banks, who set exchange rates according to their interests when they convened in the "*ferias*, or faires onely for monies...kept at *Madril, Lyons, Civil, Bisanson, Florence*". These rates were then imposed on England, which had little autonomy, since "in the maine sea of exchanges" the exchange of England only runs "as a river or branch" (1601:33).

De Santis proposed a more detailed analysis. He argued that exchange rates were set in a two-stage process. In the first stage a selected group of financial operators met quarterly at the Bisanzone fair (1605a:116) and set exchange rates on the basis of the demand and supply of the different currencies. De Santis did not object to the operation of this group of wise men, conceding that the financiers in Piacenza "took the rule" from the markets (ibid.:123). Unfortunately, though, these centrally-set exchange rates were only the basis upon which decentralised negotiations took place in the second stage. In Naples, for instance, a very limited number of financial operators (or "negotianti", as he called them) were active on the supply side

¹⁰ As a purely abstract example, let us suppose that one ounce of silver costs 100 *carlini* at the Neapolitan mint, and 50 *florins* in Florence; thus the two currencies would exchange for 100/50=2. More generally: if X is the price charged for one ounce of silver by the national mint, and Y is the price, measured in units of the foreign currency, charged for one ounce of silver by the foreign country's mint, then the mint parity between the two currencies is E = X/Y. (MacKinnon, 1993). This mint par could not be permanently violated because of arbitrage. The necessary assumptions are free capital mobility, free conversion of coins into silver at the mints, and zero transaction costs (insurance, shipping, foregone interest). The formula presented above is easily modified into $E = X/(Y-T_N)$ where T_N stands for the transaction costs of transferring silver, e.g. from Naples to Florence.

¹¹ *Seignorage* and debasement were possible causes of divergence from the mint parity (Rosselli, 2000: esp. 68-71).

of the market. On the other side of the market, demand for letters of exchange was high, and highly inelastic. As a consequence, the negotianti were able to adopt collusive practices in order to make the supply of bills of exchange artificially scarce, and set their price artificially high. "Suffice it to say that four negotianti every week have the habit of setting the price of the exchange, and most of the time, exception being made for some honourable and unselfish individuals, according to their purposes make the money now increase and now become tight" (ibid.:138-9). Apparently, the negotianti were doing more than simply exploiting arbitrage opportunities when they occurred¹²: they exploited a market power that simply would not exist in competitive markets¹³. With his analysis, De Santis was responding to these negotianti and their spokes persons, who had criticised his proposal of regulating the exchange rate by law, arguing that such regulation would amount to "ravishing" the exchange rate (ibid.:119;139). In fact, he was returning that charge to sender.

Our two authors then proceeded to their third analytical step by elucidating in detail why silver would flow out of the country. This was simply a matter of individual responses to economic incentives: domestic traders would settle their payments abroad by sending coins (by "shipping" or sending them "on the back of mules", as De Santis explained) (ibid.:114) if letters of exchange were more expensive than metallic money or, put the other way around, if their purchasing power over foreign currencies was lower. As Malynes clarified with flawless logic, if "more will be given for our money being caried in *specie* then [*sic*] by bill of exchange can be had, then our money is transported; whereas otherwise no man would adventure the money (...) if by a simple bill of exchange he might have as much payde him beyond the seas: for in truth gaine is the cause of exportation of our monies" (Malynes, 1601:34; also:16; 35).

Elaborating on the same concept, De Santis clarified that a depreciated currency would induce not just one, but three categories of agents to send silver coins out and paper into the Kingdom, thus leaving it "deprived of coins and, I may say, left with virtually none" (De Santis, 1605a:128). These three categories were domestic importers of foreign goods, foreign importers of Neapolitan goods and, most importantly, financial speculators, whose activity, "cambio per arte", consisted in buying cheap and selling dear.

Consider the Neapolitan importers of foreign goods: by sending cash abroad they would pay 13 *carlini* per *écu* at the mint par. Alternatively, by sending letters at the current exchange rate they would pay 14.5 *carlini* per *écu*. Obviously, they would choose to send cash. By contrast, foreign importers of Neapolitan goods preferred to send letters of exchange into the Kingdom, because by so doing they would pay only 0.069 of an *écu* for a *carlino*, rather than 0.076. Finally, but most importantly, financial speculators would create a major drain on the Kingdom's money stock by sending silver coins abroad to gain from variations in the exchange rate. They would obtain speculative gains if, as they wagered, the *carlino* depreciated in the future; they would then realise their profits by sending the money "back by way of exchange", i.e. by bills of exchange. Such bearish speculation was the most powerful cause of the scarcity of silver, since "gaining from the exchange" was the "cause of most exchanges" in the Kingdom (ibid.:114-15; also:151). Malynes, too, was aware of financial speculation in England. He called this speculative trade "a merchandising exchange", and severely condemned it (Malynes,1601:55).

The fourth and final step taken by De Santis and Malynes was to elucidate the consequences of the specie outflow on the *real* exchange rate, or the "terms of trade", which we define as: $R = e P^{f}/P$ (*e* being the domestic price of the foreign currency, P^{f} the price level in the foreign country, *P* the domestic price level). De Santis focused his analysis of worsening terms of trade on the depreciation of the domestic currency, i.e. on the rise in *e* in our formula (De Santis, p.116)¹⁴.

In Malynes's analysis, which was more complete on this point, the terms of trade would turn against England (foreign goods would be bought "too deare") (1601:3) as a consequence of the combined effects of a weakening pound and of a rise in the ratio P^{f}/P , this rise being determined by the flow of specie out of the domestic and into the foreign country that would be set in motion by the depreciation itself:

"But this due course being abused, causeth (...) our monies to be transported, and maket scarcitie thereof, which abated the price of our home commodities: and on the contrary advances the prices of forreine commodities beyond the seas, where our money concurring with the monies of other countries causeth plenty, whereby the price of forrein commodities is advanced" (1601:35).

Because Malynes saw this effect of money flows on the ratio between foreign and domestic price levels, some modern interpreters have credited him with an understanding of the

¹² On arbitrage in Seventeenth century capital markets see Neal and Quinn (2001).

¹³ Malynes and De Santis are generally looked down upon by commentators, both contemporary with them and of our own day, for their "conspiracy" approach to exchange rate determination. But they were in fact discussing price setting in oligopolistic markets.

¹⁴ Rothbard (2006:287) overlooked De Santis when he assigned to Malynes "the dubious credit for the emergence of the spurious and pernicious 'terms of trade' fallacy". Not every economist would agree that it is a fallacy.

"self-regulating mechanism" (i.e. the Humean price-specie flow mechanism) (Viner, 1965:76). However, Malynes rejected the idea that these price movements re-equilibrate the external balance. Far from being a remedy, these changes meant deteriorating terms of trade¹⁵, or "the overballancing of forrain commodities with our home commodities, which consisteth in the price of commodities, not in the quantity or qualitie of them" (Malynes, 1601:17). In other words, the deficit was not determined by the excess of imports over exports in volumes, but by relative price effects.

Coherently with their diagnoses, both authors recommended that the monetary authorities should revalue the domestic currency. De Santis explained that re-evaluations have positive welfare effects on consumers, as well as positive effects on tax revenues via import tariffs (1605a:116). Because of these proposals, the two economists were, and still are, criticised for their *dirigiste* attitude towards the exchange rate. But the weight of this allegation is uncertain, for the question of the relative advantages of fixed vs. flexible exchange rates is still a matter of debate today.¹⁶

Summing up, De Santis and Malynes were acute observers of financial markets and provided interesting accounts of the microeconomics of specie export points and the macroeconomics of monetary drains. My interpretation contrasts with the viewpoint of those who see these two enemies of oligopolistic dealers merely as "medievalists", as Spiegel (1983:101) considers Malynes to be. We need not necessarily take the critics of financial capitalists' malpractices for backward-looking conservatives.

4. Misselden, Mun, Serra, Turbolo: the real side of the economy and the "product mix".

On the opposite side of the two controversies we find Misselden and Mun in England, and Serra in Naples. Here is another example of transnational theoretical convergence. These authors shared the idea that the drain on metallic coin had little to do with financial factors, being instead determined by the trade deficit, in turn a consequence of uncompetitive productive structures (Serra,1613:164; Mun:42; Misselden, 1623:21).

Misselden (fl.1608-54) blamed the deficit on excessive imports of luxury goods due to men stepping "into one anothers rankes" (Misselden,1622:12-3). He argued that social mobility, in addition to threatening the stability of the social hierarchy, also resulted in external imbalances¹⁷. As causes of the trade deficit, he also mentioned wars, the obstacles to commerce determined by the Pirates in the Mediterranean sea (ibid.:17-18), and "the encroaching of strangers, in fishing upon our coasts" (ibid.:35), which displaced domestic production of consumption goods and pulled "the bread out of the natives mouthes" (1623: 48).

Thomas Mun (1571–1641) provided a much more sophisticated analysis of the competitive advantage of nations in his book English Treasure by Foreign Trade, written during the 1620 controversy but only published in 1664. His treatment included some of the factors in Misselden's list, such as wars (chapter VI), the fishing problem (chapter XIX), and excessive consumption of foreign luxuries (chapters III, VI and XIX). He argued that luxury goods should be produced at home, with great advantage for job creation and employment opportunities for English workers. But the most interesting part of his analysis concerns export promotion strategies. He opposed the hindering of exports by unduly "endearing" their price abroad, including through export duties (1664:12). Prices should be tailored to the specific demand elasticity of each product in foreign countries: English exporters should charge high prices for necessaries, because the foreign demand for these goods was inelastic. By contrast, export prices should be kept low for goods characterised by elastic foreign demand. As an example, Mun recalled that by reducing the price of clothes England had recently registered a large increase in the volume of sales to Turkey, and in revenues thereof. Well acquainted with cunning commercial practices, Mun went so far as to recommend cuts in selling prices as a long-term strategy of import penetration in foreign markets. The resulting crowding out of competitors would increase England's market share in world markets and, in due time, allow English exporters to raise prices "and so in time obtain our dear price again" (ibid.:8).

Our clever merchant knew very well that such aggressive commercial policies required the support of a strong industrial and commercial structure, which in turn called for a far-sighted industrial policy based on strategic choice of the product-mix. The crucial objective in this strategy was to move the country up the value-added chain through the promotion of domestic

¹⁵ If we consider real, rather than nominal exchange rates, it is untrue that "exchange rates, according to Malynes, were independent of commodity prices and specie flows" (de Roover:364), because he maintained that these flows affected price levels and consequently the real exchange rate.

¹⁶ It must be admitted, however, that both Malynes's and De Santis's proposals were repealed soon after having been adopted, because they were recognised to have failed.

¹⁷ Wennerlind (2011:33 ff.) illustrates the static, hierarchical view of society underlying what he describes as Malynes's, Misselden's and Mun's "Neo-Aristotelian" approach to Political Economy.

industry. Mun celebrated the apotheosis of industrial and manufacturing activities as creators of value added:

"...Iron oar in the Mines is of no great worth, when it is compared with the employment and advantage it yields being digged, tried, transported, bought, sold, cast into Ordnance, Muskets, and many other instruments of war for offence and defence, wrought into Anchors, bolts, spikes, nayles, for the use in Ships, Houses, Carts, Coaches, Ploughs, and other instruments for tillage. Compare our Fleece-wools with our Cloth, which requires shearing, washing, carding, spinning, weaving, fulling, dying, dressing and other trimmings, and we shall find these arts more profitable than natural wealth" (ibid.:13).

Following this logic, Mun argued that industrial progress requires that raw materials be imported and then re-exported as finished products (ibid.:11). This policy amounted to changing the country's international specialization from traditional sectors, such as raw materials and agricultural products, to advanced manufacturing.

In Mun's view, a nation aspiring to international economic hegemony should also devote great care to the development of commercial activities, with special reference to the carrying trade. Moreover, the country would greatly benefit from displacing other nations in the provision of transport and insurance services. This would lead to both sizeable cost savings and new employment opportunities in industrial sectors like shipbuilding. He saw the industrial sector and the service sector as an integrated whole, promoting economic progress at home and dominance over competitors internationally. In Mun's words, this promotion amounted to favouring the development of Artificial wealth "which consists in our manufacturing and industrious trading with forraign commodities" over "Natural wealth", constituting the original endowment of each country (ibid.:7). In this context, Mun was well aware of the positive synergies between a favourable international specialization on the one hand and, on the other, the competitive advantage offered by a large population employed in cutting-edge sectors. As he argued, "people which live by the Arts are far more in number than they who are master of the fruit", and "where the people are many, and the arts good, there the traffique must be great, and the Country rich." (ibid.:12).

In Mun's approach the aggressive pursuit of national interests went hand in hand with opposition to restrictions on trade, and with the promotion of multilateralism (Kindleberger, 1991). He condemned as inefficient the bilateral balanced trade imposed by the Statute of

"Imployments", requiring that foreigners use the money earned by their imports into England to buy English goods (chapter X).

Mun was a prominent, well-respected merchant, and a director of the East India Company. As early as 1623 Misselden had extolled his virtues and those of his first book, *Discourse of Trade unto the East Indies* (Misselden, 1623: 36-38). Mun had an inside knowledge of commercial practices, and went beyond the individual merchant's point of view by elucidating the structural and macroeconomic conditions and consequences of successful commercial expansion. In view of these merits, it is even more striking that in 1613 Antonio Serra (fl.1613), a "poor devil" (Schumpeter, 1954: 354) languishing in the Vicaria jail in Naples, had developed a system of thought which, while anticipating Mun's approach in many essential respects, surpassed it in profundity and comprehensiveness.

This mysterious writer, a doctor from Cosenza about whom almost nothing is known¹⁸, wrote a book entitled *A short treatise on the causes that can make kingdoms abound in gold and silver even in the absence of mines (Breve trattato delle cause che possono far abbondare li regni d'oro e d'argento dove non sono miniere)* (Serra, 1613). Serra concentrated on the economic problems of the Neapolitan Kingdom, but his lucid analysis, transcending the local dimension, goes to the heart of the structural determinants of economic development and underdevelopment.

His starting point was, once again, the balance of payments. He recognised that the external deficit was determined by two elements, namely the trade deficit on the one hand and, on the other, the payment of taxes plus rents and profits abroad, the latter element being the joint result of political and economic dependence. As he saw the situation, given the Kingdom's subordinate position within the Spanish empire it was impossible to escape political and economic dependence (1613: 238-9); but it was possible to work on the trade balance by strengthening the nation's productive structure.

Rejecting De Santis's argument on exchange rates, Serra started his bleak diagnosis of the Kingdom's economic problems with a distinction between "proper accidents" and "common accidents" (1613:118-19). Proper accidents were idiosyncratic factors related to natural conditions, such as land fertility, geographical position, etc. These "accidents", partly responsible for the country's dire economic conditions, could not be changed by policy

¹⁸ Did he take part in Tommaso Campanella's conspiracy to establish a republic in Calabria, then part of the Spanish-dominated Kingdom of Naples? Or was he, less heroically, merely guilty of counterfeiting? The doubt has not been resolved, and probably never will be: many regard his involvement in the revolt led by Campanella as a myth.

intervention. It was more fruitful to concentrate on "common accidents", i.e. the causes of national wealth amenable to policy-induced change.

The first of these common accidents was the sectoral composition of output. Successful countries relied on "a multiplicity of manufacturing activities" (ibid.:119), while the Kingdom's product mix was defective in this respect, leading to unfavourable international specialization. The Kingdom was in fact a net exporter of agricultural products, thanks to the natural fertility of its soil (ibid.:154-5), but had to import all its industrial and manufactured products, the only exception being silk. Serra's treatment of this point marks genuine theoretical innovation, because he went beyond the mere definition of a hierarchical order between economic branches and enquired into the reasons for the superiority of manufactures. Unlike agriculture, he argued, the manufacturing sector yields reliable profits because of both its independence from the weather and the less perishable nature of its products. Above all, manufacturing industry is able to multiply its products "at proportionally lower cost" (ibid: 120-121). This is the first known statement of the law of increasing returns "in the form of decreasing unit costs" (Schumpeter, 1954: 258) – an innovation that sets Serra apart from contemporary writers as a theorist of structural analysis.

The second "common accident" was "an enterprising population" (1613:122-123). Serra thought that the citizens of the Kingdom of Naples were defective in this respect, being "so unenterprising that they do not trade outside their territory … and such local industries as do exist are run not by the Neapolitans themselves, but by people from other places – chiefly other parts of Italy – the Genoese, Florentines, Bergamasques, Venetians and others" (1613:122-23). As a modern interpreter has noted, this statement was not merely "pedagogic and academic", but should rather be interpreted in the light of the politics of the Spanish empire at that moment, and possibly with Serra's own personal objectives in mind¹⁹: in line with Viceroy Lemos's projects, by so severely denouncing the Neapolitan entrepreneurial "party" and make room for a large new wave of Genoese investments in the Kingdom (Colapietra, 1973: 30).

Serra's third common accident was "extensive trade" (1613:124-125). In this respect, Serra noted that the Kingdom was at a disadvantage owing to its 'very bad' peripheral geographic position. This prevented the country from developing as a hub of international trade as Venice had done, and from having its own transport industry (ibid.:126-7).

The fourth common accident was "good government", "the most powerful of all in making the Kingdom abound in gold and silver, for it may be described as the efficient cause

We may sum up Serra's position by saying that good institutional design is the main foundation of a healthy economic system: good government would create the conditions and provide the incentives to develop a modern manufacturing sector and thereby generate a positive external account, which in turn would make the Kingdom rich in silver and gold "even in the absence of mines".

Before concluding this section, we should devote some attention to the contribution by Gian Donato Turbolo (fl.1594-1629) to the analysis of the balance of payments in this early stage of economic theorizing. With regard to the international adjustment process, it is to be noted that Misselden and Mun saw the exchange rate as moving in response to external imbalances, and accordingly argued that the level of the exchange rate was not the cause, but a consequence of that balance. Mun's analysis of competitiveness focused more on relative prices than on the equilibrating role of the exchange rate. Serra explicitly denied this equilibrating role and bluntly argued that changes in the level of the exchange rate "would not make any difference" to the external deficit (ibid.: 230-31; 152-3). Malynes and De Santis, for their part, considered the exchange rate to be determined in the market for letters of foreign exchange, and to be relatively unresponsive to the overall balance of payments.

In this respect, Gian Donato Turbolo was the only author who recognised the effects of depreciations on the trade balance. In a series of discourses delivered between 1618 and 1629 (Turbolo, 1629), he argued that a weaker domestic currency not only stimulates exports (1629: 302; 313), but also reduces the real value of rent payments abroad, these payments now being made in a depreciated domestic currency (ibid., 304-5). Thus depreciation would make domestic products more competitive and, at the same time, promote redistribution from foreigners to natives. For both reasons, the external balance would improve.

and superior agent of all the other accidents" (ibid.:176). It was indicative of Serra's courage – or recklessness – that he asserted the superiority of republican governments over monarchies, particularly if one considers that his book was dedicated to the Spanish Viceroy, the abovementioned Count of Lemos. Be that as it may, he praised republican governments because of the institutional continuity that they provided. Kings could in fact last for fifty years at most, and the Kingdom's policies and strategic objectives would then change with the advent of the new monarch. In republics, by contrast, the coexistence of old and new generations in the governing institutions, such as the Senate, ensured continuity and – simultaneously – constant rejuvenation of the governing body. Venice was again the example to admire, and possibly to imitate (ibid.:176-7).

¹⁹ He was trying to obtain the Viceroy's favour and get out of jail.

Moving from theoretical analysis to the specific conditions of the Neapolitan Kingdom, Turbolo raised the following question. The Neapolitan currency had indeed depreciated in the market for letters of exchange over the last couple of decades, just as De Santis had argued. Nevertheless, this depreciation had not brought about the deficit reduction that theory predicted. How could this paradox be explained? As master of the Neapolitan mint Turbolo was well aware of the complications of international adjustment in a metallic system. Consequently, he proposed the following answer. The positive effects of the currency depreciation had not come into operation because the Government had refused to debase the silver coins at the rate of the depreciation (ibid.: 311-2; 317), thus preventing the mint parity from converging to the level now ruling in the market for letters of exchange; and it had done so for the sake of "prestige". In that period the weak Kingdom was in fact trying to buy credibility with its creditors by keeping the currency strong (Bulgarelli Lukacs, 1993: 28). But the Government's refusal to debase the metal coins led to dramatic losses for the Kingdom. because the price paid for the bullion imported was higher than its value when minted into silver coins. This had caused a loss of "more than 400,000 ducati in few years" (ibid.: 311). Under these circumstances the money drain could not be remedied, the Kingdom was "exhausted of money" (ibid.: 299-300), and no re-equilibrating process came in operation²⁰. This our competent mint master earnestly lamented.

Conclusions. What do we learn from these old controversies?

In my opinion, we gain, firstly, in our understanding of the ways in which, in attempting to understand their world, these economists were building the conceptual basis of economics. These conceptual foundations still influence our thinking, as illustrated by the similarity between their interpretations of macroeconomic imbalances and ours.

Secondly, we become aware that the interactions of real and financial markets responsible for our current macroeconomic imbalances are not a recent phenomenon: they existed and determined similar problems in the remote times of our economists too. And, through the empirical regularities that they described, we learn about fascinating continuities and differences in the structure of financial markets and real economies between their times and ours.

Finally, from a methodological point of view, we have another interesting lesson to learn from these economists. Underlying their analytical interest was a political concern. Much as their situations differed, both the English and the Neapolitan writers viewed the balance of payments and their financial and real determinants as reflecting power in economic relations. Their approach reveals the deepest nature of international economic relations and- at the same time- it illustrates the deepest nature of international economics as international political economy.

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²⁰ Note that the scarcity of money problem was opening the way to financial innovation both in England, where it took the form of private credit (Muldrew,1998), and in the Kingdom, where the circulation of paper money was introduced by the "Public Banks" of Naples (De Rosa, 2002; Costabile, 2014, 2015).

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