

SOME EVIDENCE OF “SMART” PUBLIC PROCUREMENT: SOLUTIONS FOR SMEs IN ITALY

by *Gian Luigi Albano, Roberto Zampino*

1. Introduction

An increasingly global environment in international trade and the acceleration of technological change mostly favor dynamic enterprises, that is, the most reactive and adaptive even to abrupt transformations often caused by enhanced competition. Small and medium enterprises (SMEs)¹ have continuously showed their ability to reap opportunities stemming from a more global economy, thus providing the fuel for growth and employment. In the EU, the role of SMEs has traditionally been crucial also for the well-being of local and regional communities.

Then it is not a coincidence that the overwhelming majority of firms working within EU-27 economy in 2008 (99.8% of all enterprises, except financial businesses) were SMEs, namely more than 20 million of SMEs that accounted for 66.7% of jobs and for 58.6% of the value-added in the EU area². In particular, 92% of businesses were micro firms, although characterized by considerably lower workforce and value-added with respect to the whole economy (respectively, 29% and 21.8%).

Thus, unsurprisingly, the EU has firmly placed the needs of SMEs at the heart of the Lisbon Growth and Jobs Strategy with the ultimate aim

¹ In the EU, SMEs are defined as firms with fewer than 250 employees, and sales not exceeding EUR 50 million or an annual balance sheet not exceeding EUR 43 million. More accurate enterprise size classes may be depicted according to the following employment thresholds: micro firms (less than 10 persons employed and turnover, alternatively balance sheet total, at-most EUR 2 million), small (10 to 49 employees and turnover, alternatively balance sheet total, at-most EUR 10 million), medium-sized (50 to 249 employees and turnover at-most EUR 50 million or, alternatively, balance sheet total at-most EUR 43 million), and large (250 or more employees).

² Figures on SMEs retrieved from “Key figures on European business with a special focus feature on SMEs” by Eurostat (http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Small_and_medium-sized_enterprises); and from the European Commission web-site (http://ec.europa.eu/enterprise/policies/sme/index_en.htm). Essential figures on SMEs in Europe and in Italy are reported in the Appendix.

of contributing to the economic health and wealth of European economy resulting in the Europe's 2020 strategy. Consistently with this strategy, in 2008 the EU policy makers made a more resolute step towards making the continent as SMEs-friendly as ever by adopting the Small Business Act (SBA) with the aim to *"improve the overall policy approach to entrepreneurship, to irreversibly anchor the 'Think Small First' principle in policymaking from regulation to public service, and to promote SMEs' growth by helping them tackle the remaining problems which hamper their development."* The SBA hinges notably on a set of principles that ought to guide the conception and the implementation of policies mainly aimed at strengthening the role played by SMEs and to promote their growth as well as mitigation of those problems which hamper their development both at the EU market and Member State level. In particular, some principles point toward fostering the participation of SMEs in public procurement markets by alleviating administrative burdens, facilitating SMEs' access to financing and liquidity, supporting SMEs in accessing new markets to be achieved by ensuring fair and open competition and easier access to innovation and development of up-to-date skills in new technologies³.

Accounting for approximately 14% of the EU GDP⁴, public procurement seems to provide, almost naturally, business opportunities to SMEs. In spite of this trivial observation, SMEs, and particularly micro firms, do face many obstacles when attempting to access public procurement markets, among which stand up: lack of knowledge about tender procedures or mere difficulties in obtaining information; the large value of the contracts; sizeable (relatively to turnover) fixed participation costs (e.g., specialized know-how for decrypting the jargon used in tender documents, administrative burden, drafting the proposal, time constraints, financial guarantees required); late payments by public authorities.

Since the late 1990s Italy has been struggling with savings-enhancing and SMEs-friendly solutions in public procurement (for goods and services). The two objectives might be potentially conflicting as the former often requires some degree of demand aggregation that makes more difficult, *ceteris paribus*, for SMEs to get a fair share of public contracts. In this paper, we provide an account of the efforts deployed in Italy through the implementation of the program for the rationalization of public spending in goods and services and the creation of Consip S.p.A., the National Central Purchasing Body. The performance of SMEs in national frame contacts

³ In February 2011, the European Commission released the SBA Review with the aim to present an overview of the progress achieved in implementing the Act while emphasizing the need of laying down new actions to respond to challenges resulting from the current economic crisis: http://ec.europa.eu/enterprise/policies/sme/small-business-act/index_en.htm.

⁴ Recent estimates retrieved from the European Commission web-site: http://ec.europa.eu/internal_market/publicprocurement/index_en.htm.

(above the EU threshold) awarded by Consip is benchmarked against the one at the EU level, providing some evidence that demand aggregation carried out through a centralized public body does not hurt *per se* SMEs (section 3). We then turn our attention to the transactions on the Italian government’s e-marketplace that was conceived as a “smart” B2G solution for contracts below the EU thresholds (section 4). The performance of SMEs is again benchmarked against the one at the EU level. The Italian market does confirm the finding at the EU level that contract value is a major factor in determining the SMEs’ success rate. Surprisingly, the threshold value above which in particular small and micro firms suffer from the competition of bigger competitors is fairly low, that is, approximately 50,000 Euro. Unlike the results at the EU level, central purchasing bodies seem to display a more marked “preference” towards SMEs than local government.

2. The modernization of public procurement and the electronic challenge

According to the Report drafted in 2010 by GHK⁵ for the European Commission, the number of tender notices above the EU thresholds published by Member States’ public authorities on TED (Tenders Electronic Daily) amounted to over 300,000 between 2006 and 2008, for a total value of 1,137 billion euro. The number of tenders has steadily increased over the last decade, but it experienced a steep growth in 2007-2008 (+42% in these two years). Since the growth of total values indicates a positive growth evolution of approximately 2% per year, we can immediately deduce that the average value of published notices has decreased over the same period. If, on one hand, the distribution of published notices among Member States mirrors both the size of each country and the specific institutional framework – for instance, where public procurement is largely decentralized, a huge number of small-value tenders is observed – on the other hand, the fact that local authorities account for the relative majority of public contracts above the EU thresholds (34% and 25%, respectively in 2007 and 2008), as well as the preponderance of service and supply contracts over civil works (jointly accounting for 83-84% of all contracts between 2006 and 2008), clearly reinforces the statement that SMEs might play an important role in public procurement markets.

However, statistical analyses performed on data retrieved from published notices and contracts awarded in recent years suggest, at least to some

⁵ “Evaluation of SMEs’ access to public procurement markets in the EU”. A GHK Final Report coordinated by DG Enterprise and Industry of the European Commission, on September 2010. Available at http://ec.europa.eu/enterprise/policies/sme/business-environment/files/smes_access_to_public_procurement_final_report_2010_en.pdf.

extent, that SMEs do suffer from non-negligible disadvantage in accessing public procurement markets, particularly when compared to their overall weight in the European economy. Indeed while SMEs were awarded approximately the 60% of the number of above-EU-thresholds public contracts in 2006-2008, in terms of value SMEs benefited only from a thin 34% of the overall public procurement market. In this scenario, micro enterprises, the most representative class in the European economy, perform worse than all bigger classes: while benefiting from 18% of the number of contracts, the overall value was as small as a meager 6%. Moreover, according to a previous report of 2007 the value of the fraction of public procurement contracts above the EU thresholds awarded to SMEs has constantly decreased during the period 2002-2005⁶, thus confirming the concerns about SMEs' ability to defend their competitiveness in public procurement markets.

The diffusion of electronic procedures in the EU markets for public contracts has represented the main tool to favor SMEs access in public procurement markets during the last decade. Electronic procurement procedures are positively perceived both by public bodies – because they may secure more effective and cost-efficient processes – and suppliers, especially SMEs. Smaller suppliers may effectively benefit from a number of advantages: easier and timely accessing to relevant information related to public contracts; accessing in a market where their participation can stimulate itself competition against incumbents usually embodied by large enterprises, so gaining new market shares; reducing of participation costs both in terms of direct costs of administrative procedures and potential cuts of inefficiencies due to streamlined and standardized processes; availability of a potential wider demand side thanks to the opportunity of reaching new (public) customers.

Inspired to a great extent by these forces, the current draft of the new *Public Procurement EU Directives* (that will replace Directives 2004/17/EC and 2004/18/EC) emphasizes the innovative role that electronic purchasing procedures have played since they were introduced in Member States' institutional frameworks. Since the adoption of the 2004 Directive several policy initiatives have taken place in the attempt to create a modernized and simplified business environment that is more innovative, ITC-oriented and more SMEs friendly: *i)* the *e-Procurement Action Plan* (2004) aimed to establish requirements and deadlines for revising national legislation in order to implement the legal framework for effective and non-discrimina-

⁶ A 2007 study on the evaluation of SMEs access to public procurement markets in the EU, based on the analysis of data gathered from 2002 to 2005 for 25 Member States, estimated for 2005 a share of SMEs winning contracts of 64% against 42% in terms of value. See "Evaluation of SMEs' Access to Public Procurement Markets in the EU", Final Report coordinated by DG Enterprise and Industry of the European Commission (2007). Available at http://ec.europa.eu/enterprise/dg/files/evaluation/pme_marches_publics_report_en.pdf

tory e-procurement systems; ii) the *Manchester Ministerial Declaration* (2005) intended to stimulate the whole transition of procurement procedures on the electronic platforms by 2010; iii) the *i2020 Action Plan* with the exact description of actions to enforce the achieving of relevant targets; and last but not least iv) the *Small Business Act* (2008) reflecting the Commission’s political will to recognize the central role of SMEs in the EU economy, putting in place a comprehensive policy framework in order to create the best conditions which should allow smaller enterprises to unleash their full potential in national economies (e.g., making public bodies more responsive to SME’s needs; facilitating SMEs’ participation in public procurement, also promoting the upgrading of skills in SMEs and all forms of innovation; facilitating SMEs’ access to finance, other than enhancing the legal environment supportive to timely payments in commercial transactions).

In 2010, GHK carried out a survey among procurers and suppliers about the use of e-procurement tools⁷. GHK’s final report suggested a clear increase in the contracting authorities’ preferences for e-procurement instruments compared to what found in a similar exercise conducted in 2007 (overall, 73% against 58%). If, on one hand, no relevant differences arise in the distribution of preferences among categories of public buyers (central government and regional/local authorities report respectively 70% and 68%), on the other hand, there is still room for improvement in the future. The performance of suppliers appears also outstanding: 82% of respondents are, in fact, inclined to prefer e-procurement tools (previous reported 42%). However, the low performance of micro enterprises – only 66% responded to use e-procurement procedures, whereas other size classes ranged over 80% – suggests the centrality of questions recently laid down by the European Commission with the *Small Business Act*.

In Europe, Italy ranks very low with respect to the fraction of contracting authorities and suppliers using e-procurement tools – 62% and 66%, respectively – and in both cases rather below the EU averages (73% and 82%). These findings confirm that Italy needs to implement more concretely the road map drawn by EU Commission in the *Small Business Act*, especially in the implementation of those initiatives that are likely to strengthen SMEs’ sustainable growth and competitiveness.

It must be recognized, however, that especially in the last decade the Italian government has made firm steps in this direction, particularly in facilitating the access of SMEs in public procurement markets by means of a wider employment of electronic platforms. Among the most noticeable examples stand up: i) the strengthening of the *Electronic Marketplace for Italian Public Administrations* (MePA) with the combination of new catalogues and a more rigid compulsory regulation of under EU-thresholds

⁷ GHK Final Report (2010), *op. cit.* p.95.

purchases by public buyers; *ii*) the establishment of networks of “virtual desk”, set up with the support of the Italian Trade Associations, and aimed to inform / support SMEs about the correct use of e-procurement solutions; *iii*) the support to the start-up of new enterprises – especially those by young and women entrepreneurs – and networks of firms by granting (automatically) them a share (60%) of future national and local public funding, whereof almost 25% should be addressed to micro and small enterprises⁸; *iv*) the recommendation to divide in lots single contracts to be awarded by open competition procedures in order to foster participation of micro and small firms; *v*) the support to financing of micro and small firms through both measures aimed to encourage the recapitalization of firms, and the strengthening of guarantee funds to face the current credit crunch and lacking cash⁹; *vi*) the modernization and simplification of procedures to start up new innovative enterprises and the cut of administrative burdens¹⁰; *vii*) the stimulus to the economic growth by means the enforcement on public buyers to accelerate and / or reduce delay of payment for purchases of goods and services (certification and transfer of commercial credits)¹¹. In the following section we will focus on the one single initiative, namely, the implementation of the program for the rationalization of public spending in goods and services.

3. The Italian experience: The role of Consip S.p.A.

The Italian e-procurement strategy was motivated, at least during the first years, by the urgency of modernizing and making more efficient public administration’s public procurement processes. It was arguably a “demand-side-oriented” approach. To this end, the Italian Government created Consip S.p.A., a private-company entirely owned by the Ministry of Economy and Finance (MEF), that was entrusted in 1997 with the mission of managing and developing IT services for the MEF through technical, organizational and project consultancy pertaining to the Ministry’s information systems and its activities in the areas of public financial management; and in 1999 with the mission of implementing the program (the “Program” henceforth) for the rationalization of public spending on goods and services through the use of information technology and innovative tools for the purchases made by public bodies.

⁸ Law n. 180/2011, so called “Statuto delle imprese”.

⁹ Government Decree n. 201/2001, so called “Decreto Salva Italia”; Government Decree n. 83/2012, so called “Decreto Sviluppo”.

¹⁰ Government Decree n. 1/2012, so called “Decreto Cresci Italia”; Government Decree n. 5/2012, so called “Decreto Semplifica Italia”; Government Decree n. 179/2012, so called “Decreto Sviluppo bis”.

¹¹ Government Decree n. 1/2012, so called “Decreto Cresci Italia”; Parliament Decree n. 192/2012.

3.1 The role of SMEs in the “Program”

The Program aimed initially at aggregating public demand and at facilitating the process through which public bodies issued purchasing orders. This was carried out by awarding National Frame Contracts (NFCs). The NFCs consist of a set of contracts whereby competitively selected contractors undertake to accept – at given conditions and prices – orders from public administrations, up to a pre-determined monetary amount or quantity of goods (or services) or, in any case, until the expiry date of the frame contract. Administrations send their online orders for supplies directly to the companies that have been awarded the contracts. All public administrations can make use of the NFCs. However, while central government (mainly Ministries) are mandated to use NFCs, other authorities (regions, provinces, municipalities, school and health sector) can use NFCs if they wish. However, whenever a NFC is active all other authorities have to meet-or-beat the quality-price ratio set by the standing NFC if they wish to perform a procurement process of their own.

Thus it can be maintained that the Italian policy makers sought higher level of efficiency by achieving lower unit price (via buying in bulk) and simplifying/speeding up public bodies’ purchasing process (via e-ordering). However, demand aggregation brought about serious concerns about the risk of cutting off SMEs from a sizeable fraction of public procurement markets. Over the last decade, lobbyists, academics and (self-declared) experts have often raised their voices against the risks from a “centralized procurement system” for goods and services, although moderately centralized in the Italian case. To what extent were and are these voices well rooted in figures? In other words, to what extent does raising the value of procurement contract hamper SMEs participation and, consequently, the share of public contracts awarded to SMEs? There are two ways of addressing this question. The first, perhaps rhetorical, way is to ask whether a 1 million euro contract is less SMEs-friendly than a 100,000 euro contract. *Ceteris paribus*, the answer has to be positive since economic requirements are more stringent in the first case. The second, possibly more sensible, way of tackling the same issue is to ask whether SMEs participation in competitive *centralized* procurement is adversely affected with respect to other competitive environments in which public contracts of similar size/value are awarded by procurement authorities on their own. In other words, is it the case that the *organizational form* of procurement processes matters?

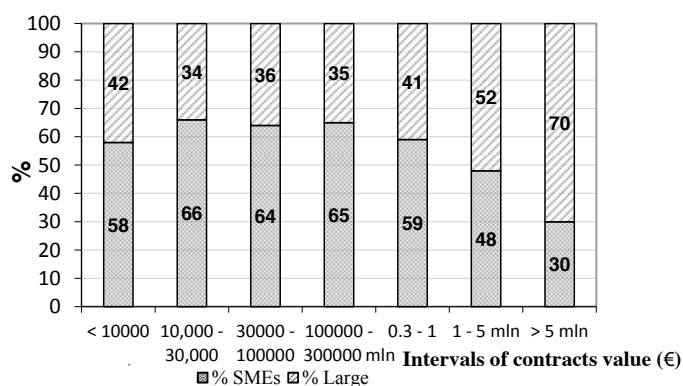
The chart below summarizes some of the findings contained in a study on SMEs’ performance in public procurement markets at the EU level¹².

¹² Our elaboration on data retrieved from “Evaluation of SMEs’ access to public procurement markets in the EU - DG Enterprise and Industry”. GHK Final Report, September 2010.

We have also gathered data on SMEs performance in competitive procurement processes (basically the award of NFCs) carried out by Consip.

During the period march 2011-july 2012, 34% of the contracts/lots were awarded to SMEs. This seems to be in line with what measured at the EU level given that the value of lots in the NFCs awarded by Consip is above 1 million euro. In other words, demand aggregation by a Central Purchasing Body together with an appropriate division into lots does not seem to add any further adverse effect to SMEs performance in public procurement markets.

Fig. 1 – Shares of public contracts according to firms' size in the EU-27 in the period 2006-09.



Source: Our elaboration on data retrieved from "Evaluation of SMEs' access to public procurement markets in the EU - DG Enterprise and Industry". GHK Final Report, September 2010.

3.2 Consip: The Electronic e-Marketplace (MePA)

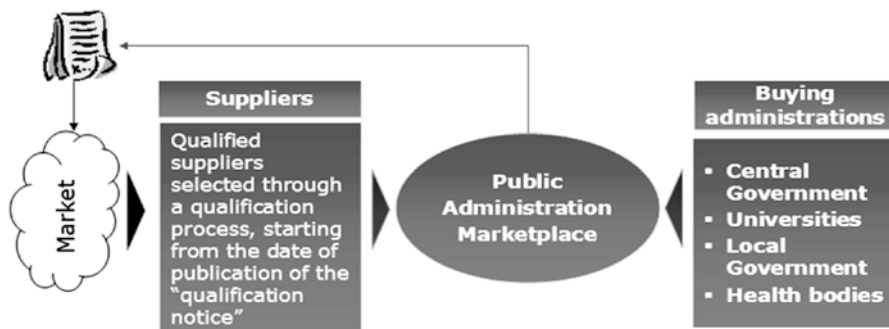
Italy was one of the first EU countries to adopt an e-procurement regulation. With the Presidential Decree No. 101/2002 the Italian Government introduced, simultaneously to the EU regulation tendency in matter of "procurement-electronic-procedures-SMEs", the use of digital procedures in public procurement allowing the Italian public sector to perform acquisitions below the EU threshold through the Government's e-procurement platform. The MePA was created to promote electronic-based procurement and to streamline purchasing processes. More generally, it aims at "updating" the culture and the practice of public purchasing management.

The MePA is conceived, at its core, as a complementary tool with the set of framework contracts that Consip awards on behalf of public bodies for acquisitions above the EU threshold. Very often small firms cannot handle high-value framework contracts, usually resulting from demand aggregation of many public bodies. As a result, the Italian policy makers created the MePA in order to have micro-SMEs in a better position to be awarded public contracts below the EU threshold.

The e-Marketplace is open to qualified suppliers according to non-restrictive selection criteria. After qualification, suppliers' catalogues are uploaded into the MePA, displayed in a dedicated web site and thus made available to the entire community. Suppliers can provide a non-binding geographical area of coverage for their business. Catalogues are presented in a standardized template in order to make easier for public bodies the evaluation of different products. Any buyer freely registers to the e-Marketplace, browses catalogues, compares products and prices, makes requests for quotation or purchases directly from e-catalogues. The entire transaction process is digital, supported by digital signature in order to ensure legal compliance and overall transparency of process. Figure 2 provides a conceptual scheme of the e-Marketplace. The MePA is fee free for both suppliers and public buyers, but business is funded through the Ministry of Economy and Finance's (MEF) transfers to Consip.

From the buyers' point of view, the potential advantages to procurers would include, among others: *i*) reduction of purchasing and transaction costs; *ii*) development of human capital; *iii*) broadening of suppliers base; *iv*) enhanced transparency and ease of comparison among different goods / services; *v*) purchases logging and subsequent expenditure monitoring. While potential advantages for suppliers would include: *i*) selling cost reduction (due to broadening of potential customers base, lower intermediation costs and free digital platform); *ii*) improved visibility with respect to the span of public buyers; *iii*) B2G introduction in addition to existing B2B and B2C; *iv*) extending the platform of potential buyers.

Fig. 2 – MePA: the conceptual scheme. Source: Our elaboration.



Public bodies can purchase goods and services on the MePA by means of two alternative tools: Direct Purchase (DP) and Request for Quotation (RFQ). The DP allows any public buyers to buy directly from the e-catalogue at a pre-fixed (i.e., posted) price and technical specifications (including delivery conditions and post-purchase contractual clauses). It is usually adopted to purchase very low-value items. It can also be suitable when the public body needs to satisfy urgent, although low-value, needs that would

not justify the recourse to a lengthier and costlier competitive procedure. The RFQ is a competitive selection procedure through which the buyer solicits all qualified¹³, or a certain group of suppliers, to submit a tender. Responding suppliers provide both a price quotation and the details of technical/quality improvements when required. The contract is awarded to the most preferred price-quality combination without using an explicit, that is, publicly announced, scoring rule. Thus procurers have some discretionary power in awarding RFQs. Contracts may be awarded to a supplier who is not first in the price ranking of the product but, for instance, offers valuable services that are not offered by other suppliers (e.g., fast shipping) or is able to deliver it at lower costs. A RFQ is then conceived as a way to introduce some degrees of competition in the acquisition of relatively more valued product/services.

4. MePA: A First Analysis of the Expenditure Patterns

Although MePA was launched in 2003, we limit our analysis to the transactions that took place during the period 2005-10¹⁴, focusing our attention on DPs for two main reasons: on one hand, they appear easier and more frequently used for very low-value purchases with respect to RFQs; on the other hand, DPs reveal public bodies' preferences over what to buy and to which supplier to issue a purchasing order. As a matter of fact, the main feature of a DP entails that any registered buyer can easily "click and buy" any preferred object or service on the electronic catalogues at fixed and publicly verifiable technical-economic clauses, being excluded any sort of renegotiation of contractual clauses between involved parties.

DPs represent the larger share of the overall e-Marketplace's volumes, roughly 81% of the total number of purchases (RFQs accounting for the remaining 19%), but are characterized by a lower mean value per transaction (ca. € 1,242) than RFQs (ca. € 10,800). The analysis contemplates a dataset of 188,447 DPs for an overall value of roughly 230 million Euro as the outcome of purchases operated for all the categories of goods and services available on the MePA from January 2005 until September 2010. Most of transactions belonged to the following classes of good and services: ICT (goods and services), office equipment, electrical equipment and medical supplies. The legislative structural break occurred in 2007 (Financial Law - Act n. 926/2006) mostly explains the hasty increase of all the

¹³ That is, all suppliers that were qualified to sell the category of products included in the RFQ.

¹⁴ In particular, we treat data of electronic transactions implemented in the e-Marketplace until September 2010, the latest information available to us. We omit to include in our dataset information referred to the period 2003-2004, because of they may be affected by measurement errors probably induced by the lack of experience of the users of the platform itself in the starting point.

economic indicators after the year 2007 (Figure 3). The dramatic regulatory modification made the use of the MePA for purchases below the EU thresholds compulsory for central government bodies. The mandatory use of the MePA for central government, while contributing to the overall rise of the value of orders (+600% throughout the reference period), may have also contributed to a decreasing trend of the mean value of transactions (-17%), as displayed in Figure 4. The joint interaction between a rising number of transaction and a decreasing mean contract value should have provided, at least in principle, the ideal environment for micro and small enterprises to thrive in this specific (sub-)market of public contracts.

Fig. 3 – MePA: Annual distribution for volumes and transactions (2005-10*) – (*data until September 2010). Source: Our elaboration on data retrieved from the data-warehouse of Consip.

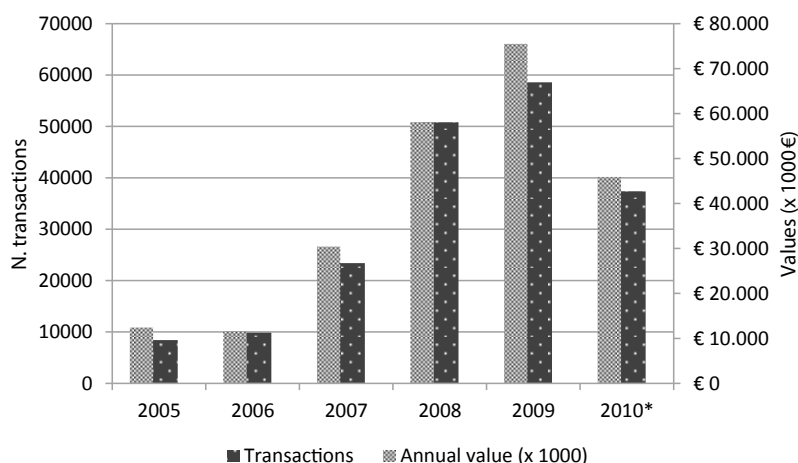
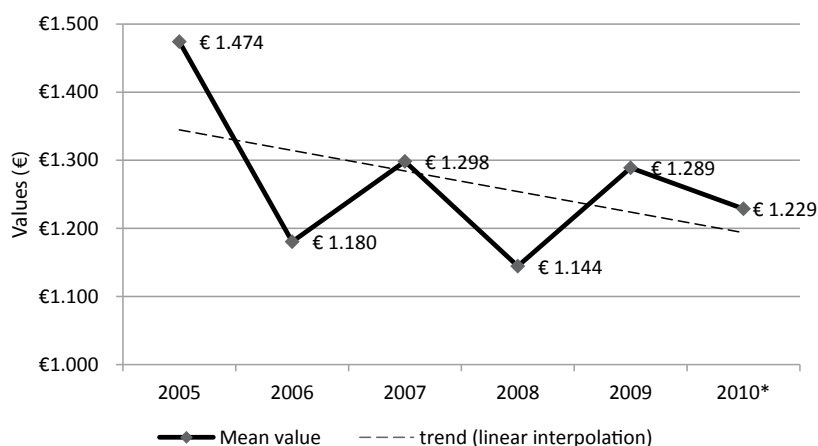


Fig. 4 – MePA: Trend for DPs mean values (2005-10*) – (*data until September 2010). Source: Our elaboration on data retrieved from the data-warehouse of Consip.

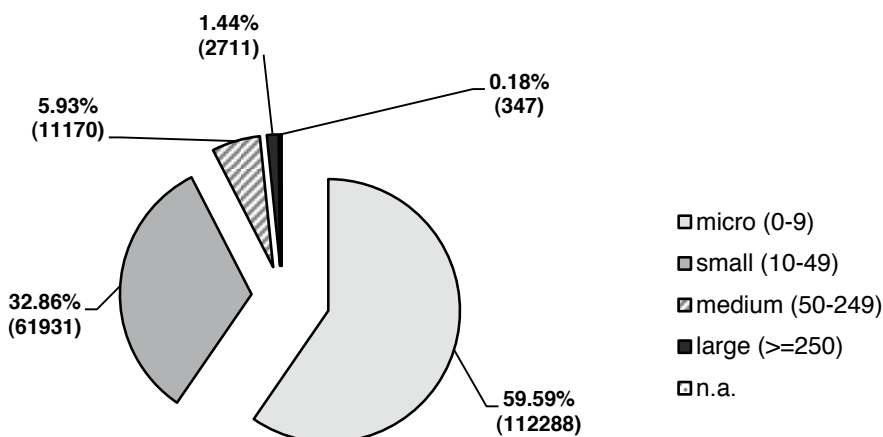


4.1 The role of SMEs in the MePA

Data on available contracts stipulated through the e-Marketplace allow us to depict the distribution of suppliers according to the firms' size (limited to the number of employees according to the Eurostat's standard classification)¹⁵. Although very small enterprises (up to nine employees) cover the largest share of this market (less than 60% of all suppliers, Figure 5), not only the population of micro firms is here far from the percentages derived from the overall European and national economy for the same dimensional class (respectively, 92% and 95%), but their performance is also worse than the estimates reported on the recent survey of GHK¹⁶, according to which only the 66% of micro firms declares to use e-procurement procedures.

A glance at the total value of purchasing orders addressed to micro suppliers reveals a different scenario: while the value added generated by micro enterprises in Europe and in Italy amounts to 22% and 29% respectively, the same set of firms benefits for a stark 54% of total awarded DPs (Figure 6), although the average contract value to micro firms is the lowest among all classes of firms (Figure 7). Thus micro enterprises get the lion's share of DPs, consisting of a large number of very low-value contracts.

Fig. 5 - MePA: distribution of DPs (transactions) by firms' classes (2005-10*) – (*data until September 2010). Source: Our elaboration on data retrieved from the data-warehouse of Consip.



¹⁵ The classification here adopted omits additional information on firms' turnover not available to our knowledge.

¹⁶ GHK Final Report (2010), *op. cit.* p. 95.

Fig. 6 - MePA: distribution of DPs (total values) by firms' classes (2005-10*) – (*data until September 2010). Source: Our elaboration on data retrieved from the data-warehouse of Consip.

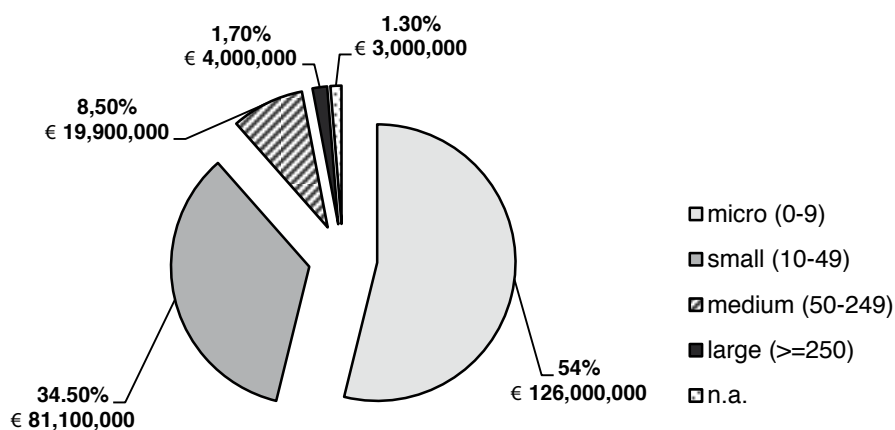
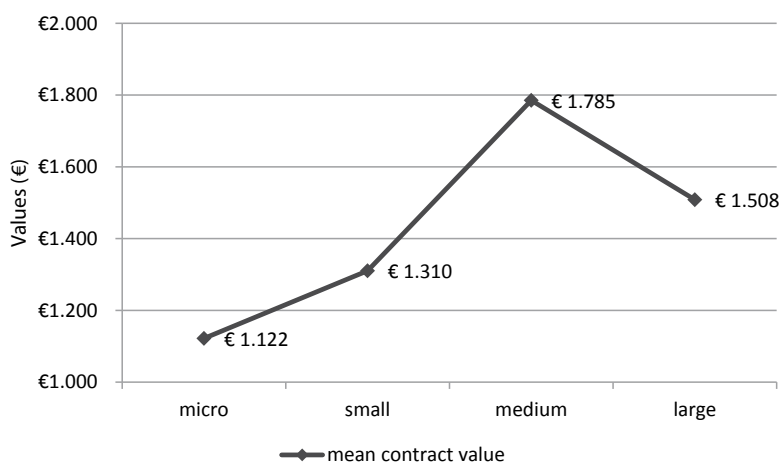
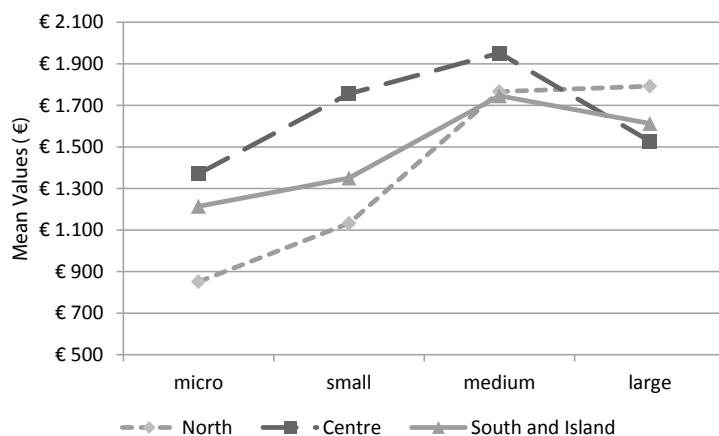


Fig. 7 - MePA: Trend for DPs mean values by firms' classes (2005-10*) – (*data until September 2010). Source: Our elaboration on data retrieved from the data-warehouse of Consip.



We have also carried out a similar analysis on Italy's main geographical areas of Italy, namely North, Centre and South-with-Islands. Key figures confirm that most of contracts are concentrated in smaller-size classes of firms, both in terms of value and number of awarded contracts. A closer look at the contracts mean values shows that larger firms get more valuable contracts on average (Figure 8). It is worth pointing out that the highest mean values are observed in Central regions. This is compatible with the presence in the Centre of most central government bodies.

Fig. 8 - MePA: Trend for DPs mean values by firms' classes and geographical areas (2005-10*) – (*data until September 2010). Source: Our elaboration on data retrieved from the data-warehouse of Consip.



4.2 Factors affecting SMEs' success: the Italian experiment of MePA

Descriptive statistics seem to confirm, at least to some extent, that the main objective of the MePA has been achieved: the design of an e-Marketplace allows a growing number of SMEs to participate in the public procurement market. However, the uneven distribution of the contract values draws our attention and requires further investigation. Although SMEs are the mostly represented class of firms in the Italian industrial system, they are awarded, on average, lower-value contracts than larger firms. These general findings are further backed by more sophisticated analyses which exploit the particular nature of the available data. Indeed information on suppliers' class sizes are instrumental to identify some of the underlining factors influencing SMEs' ability to win public contracts.

These factors can be empirically identified by means of the estimation of non-linear econometric models which reveal the potential effects (in probabilistic terms) of a set of explanatory variables on the performance of the supplier's dimensional class. We generally refer to them as the ordered logistic models (OLM)¹⁷. The analysis reported in the Final Report of GHK¹⁸ points out some crucial factors influencing SMEs participation and success in the European public procurement markets, among which stand up: the value of a single contract (or lot), the nature of the procurer (or the public

¹⁷ The regression analysis (logistic model) estimates the impact of each of the factors on SMEs' probability to be awarded public contracts, estimating how each factor, on average, affects the probability ratio that a specific public contract could be awarded to a micro, small or medium enterprise.

¹⁸ GHK Final Report (2010), *op. cit.* p.95.

sector), the sector of goods and services procured, the kind of tendering procedure and award criterion¹⁹. Unsurprisingly, when the public buyer is a local authority SMEs seem to compete more effectively against larger firms than in those circumstances when the procurement process is carried out by central government bodies or national agencies: the fraction of the public contracts that local authorities award to SMEs appears significantly larger than others, both in terms of number and values. Also remarkable are the findings on the influence of tender procedures. While no noteworthy effects are observed on the number of contracts won, SMEs appear to benefit, in terms of contract values, when open procedures are used. SMEs’ share shrinks when restricted procedures are used, getting even smaller in the case of negotiated procedures and competitive dialogue.

According to the report, the type of award criterion generates ambiguous effects on the success rate of SMEs. On one hand, SMEs tend to do slightly better in terms of number of contracts when the economically most advantageous tender (EMAT) criterion is used; on the other hand, the success rate in terms of contract value rises significantly when the lowest price criterion is used. This may be due to the existence of a potential positive correlation between the public buyer’s choice of the EMAT criterion and the value of the contract (which is related, *ceteris paribus*, to more complex and high quality contracts/projects). The estimates confirm in fact that large-size contracts may represent an important barrier to SMEs in accessing public procurement markets. The findings of GHK’s final report point out that the share of SMEs winning public contracts is roughly 65% for contracts worth at most 300,000 Euro, and markedly decreasing above this threshold. Exploiting data from the Italian government’s e-Marketplace, Albano *et al.* (2013) adopt a similar econometric approach, although based on different logit models²⁰. Odds ratios estimated for the value of DPs confirm the broad evidence arising from descriptive statistics as well as from the econometric estimations at the European level, namely that the contract value appears positively related to the firm’s size. More precisely, the higher the value of the contract the higher the probability that the supplier is a larger one. Firm’s individual experience in the e-Marketplace – as measured by the cumulative number of contracts the same firm has been awarded – also has a substantial effect on the probability that one specific size class is selected, namely larger enterprises profit from experience more than smaller ones. When, instead, experience is calculated on public

¹⁹ The awarding criteria we refer to are the lowest price and the EMAT, where EMAT stands for the economically most advantageous tender criteria.

²⁰ The authors relax progressively those assumptions on the strong proportionality of estimated coefficients of the classical logit model, and estimate some generalized ordered logit models (GLM) in terms of non-parallel-lines (NPL) and partial-parallel-lines (PPL) assumptions respectively verified (William, R., 2006).

bodies' side – that is, the cumulated number of orders issued on the e-Marketplace – it exerts a positive impact on smaller suppliers' success rates.

The authors also argue that the size of each side of the market – that could be interpreted as a proxy for the level of competition among sellers/buyers – has an influence on SMEs' likelihood to win public contracts. According to their findings, the size of the demand side increases the probability that micro and small suppliers are preferred with respect to larger ones. While the larger the supply side the higher probability that small firms are preferred, relative to micro and medium-large competitors.

Unlike the results of the GHK's report – that emphasizes the relevant as well as positive effects of local and regional authorities on success rates for smaller enterprises – the regression controls for the Italian public sector show a different story: it does emerge a strong positive relation between local authorities (and other public buyers) with the size of successful firms (larger ones), whereas central bodies buy more frequently from smaller firms.

Finally, the estimated coefficients for the nature of goods and services procured (e.g., ICT, furniture, stationery, electric materials, health products, etc.) suggest different purchasing patterns mainly between the purchases of ICT and non-ICT nature. The former seems to be strongly associated with micro suppliers, whereas the other catalogues – among which the electric one would display the highest influence – explain a more robust relation with all other larger suppliers. In particular, by relying on a joint evaluation of the effects of contracts value, nature of goods and service, type of public buyer and geographical areas, the authors find evidence that a growing contract value (for an ICT purchase by whatever public body in the Centre of Italy) may negatively affect the probability that a contract is awarded to micro firms. The micro enterprises, however, seem to dominate, in terms of absolute probabilities, up to a threshold for contracts value at 50,000 Euro. Above this threshold public buyers prefer buying from either a small or a medium-large firm. Conversely, when non-ICT contracts are considered (limited to the whole country but the Centre), the probability of a micro firm being awarded a DP is inversely correlated with the value of the contract. The magnitude of probabilities, both for micro and medium-large firms are quite low. But there exists a clear preference for buying from small enterprises, with the estimated probabilities decreasing only for contracts above the threshold of 100,000-150,000 euro in favour of medium-large suppliers.

5. Concluding remarks

While it is commonly understood that public procurement processes are punctuated by features hampering the participation of SMEs, it is less obvious what kind of concrete actions should be taken so that small businesses reap a fairer share of public contracts. Most experts and policy makers would immediately point towards a wider adoption of e-procurement solutions as a panacea. However, since electronic solutions are never implemented end to end, one is left wondering in which phases of the procurement processes ICT solutions would generate the highest potential benefits to smaller firms. Would SMEs most benefit from electronic solution at the pre-award, award or post-award stage? Experiences in the EU (and outside of the EU) are in fact quite diverse and inconclusive.

In this paper, we have depicted the solutions put in place in Italy, especially since the creation of Consip S.p.A. as the National Central Purchasing Body. Available data seem to indicate that the mission of aggregating public demand for savings purposes can be reconciled with the implementation of purchasing arrangements to facilitate the access of SMEs to the national procurement market. A close look at transactions on Consip’s e-Marketplace does confirm that the electronic Marketplace generates a high number of purchasing orders to micro and small firms provided that the contract value is really a very low one and belongs mainly to the catalogue of ICT goods and services. In stark contrast with what found in a Europe-wide analysis, central government bodies on the MePA are more likely to select a small firm for trade thus raising the concern that trade patterns at the EU level may be the results of very heterogeneous patterns in different regions. This, needless to say, calls for more extensive and punctual empirical analyses of public procurement data.

*Gian Luigi Albano,
Research Unit, Consip S.p.A.
gianluigi.albano@consip.it*

*Roberto Zampino,
Research Unit, Consip S.p.A.
roberto.zampino@consip.it*

Abstract

Although it is widely recognized that public procurement may act as a “pull” mechanism for development and employment, serious concerns are constantly voiced as to the friendliness of public procurement processes towards small and medium enterprises (SMEs), arguably the most vital sector of the EU economy.

In this paper, we will have a look at the concrete measures taken at the EU level to promote an increasing inclusion of SMEs in public procurement markets. We will then focus on the Italian experience and dwell on the results achieved since the creation of Consip S.p.A., the National Central Purchasing Body. In particular, data on transactions below the EU thresholds from the e-Marketplace managed by Consip will allow us to shed some light on the patterns of trade between public buyers and the different subgroups of firms in the class of SMEs.

Riassunto

Sebbene sia ampiamente riconosciuto che la spesa pubblica per l'approvvigionamento di beni e servizi possa contribuire significativamente allo sviluppo all'occupazione, si dibatte ancora ampiamente sulle reali possibilità di accesso delle PMI alle procedure di procurement pubblico, verosimilmente il settore più attivo nell'economia europea.

In questo articolo sono riassunte le misure concrete che sono state prese a livello di Unione Europea per promuovere la partecipazione delle PMI al mercato degli acquisti pubblici. Il seguito del lavoro si focalizza sull'esperienza italiana, soffermandosi sui risultati raggiunti a partire dalla creazione della Consip S.p.A., la centrale di committenza nazionale. In particolare, l'utilizzo dei dati delle transazioni di valore inferiore alle soglie comunitarie, operate sul mercato elettronico gestito da Consip, consente di chiarire i modelli di comportamento alla base delle strategie di interazione tra l'acquirente pubblico e le differenti categorie di impresa nella classe di PMI.

JEL Classification: H57, L11, L25, L81

Keywords (Parole Chiave): public procurement, electronic procurement, micro-small and medium enterprises, performance rate; procurement pubblico, mercato elettronico, piccole-medie imprese, tasso di successo.

References

Albano, G. L., F. Antellini Russo, G. Castaldi And R. Zampino, (2013), “Evaluating Small Businesses’ Performance on the Italian Government’s E-Marketplace.” An earlier draft circulated under the title “Small but not too much! Evaluating Small and Medium Enterprises’ Performance on the Italian Government’s E-Marketplace,” (2012). Available at http://papers.ssrn.com/sol3/cf_dev/AbsByAuth.cfm?per_id=611017.

Albano, G. L. And R. Zampino, (2013), “Strengthening the Level of Integrity of Public Procurement at the Execution Phase: Evidence from the Italian National Frame Contracts”. In G. Piga and S. Treumer (Ed.), *The Applied Law and Economics of Public Procurement*. Routledge, London and New York, pp. 185-200.

European Commission (2007): “Evaluation of SMEs’ Access to Public Procurement Markets in the EU”. GHK and Technopolis Final Report coordinated by DG Enterprise and Industry of the European Commission, September 2007. Available at http://ec.europa.eu/enterprise/dg/files/evaluation/pme_marches_publics_report_en.pdf.

European Commission (2008): “Think Small First: A Small Business Act for Europe”. Available at http://ec.europa.eu/enterprise/policies/sme/small-business-act/index_en.htm.

European Commission (2010): “Evaluation of SMEs’ Access to Public Procurement Markets in the EU”. GHK Final Report coordinated by DG Enterprise and Industry of the European Commission, September 2010. Available at http://ec.europa.eu/enterprise/policies/sme/businessenvironment/files/smes_access_to_public_procurement_final_report_2010_en.pdf.

European Commission (2013): http://ec.europa.eu/enterprise/policies/sme/index_en.htm.

Eurostat (2011): “Key Figures on European Business with a Special Focus Feature on SMEs”. Available at http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Small_and_mediumsized_enterprises.

Williams, R., (2006), “Generalized Ordered Logit/Partial Proportional Odds Models for Ordinal Dependent Variables”. *The Stata Journal*, 6 (1), pp. 58-82.

APPENDIX: ESSENTIAL FIGURES ON SMEs IN EUROPE AND ITALY

*Tab.1 - Firms size class analysis of key indicators, non-financial business economy, EU-27 (2008).
Source: Eurostat, "Key figures on European business with special feature on SMEs", 2011.*

	N. of firms (million)	N. of employees (million)	Value-added (billion)	Estimated labour productivity (EUR 1000 / person)
Micro	19.3	39.3	1348	34.3
Small	14.0	27.9	1147	41.2
Medium-sized	0.2	23.4	1122	47.9
All SMEs	20.9	90.6	3617	39.9
Large	0.0	45.2	2559	56.6
All firms	21.0	135.8	6176	45.5

	N. of firms (share %)	N. of employees (share %)	Value-added (share %)	Estimated labour productivity (relative to total %)
Micro	92.0	29.0	21.8	87.8
Small	6.7	20.5	18.6	90.5
Medium-sized	1.1	17.2	18.2	105.3
All SMEs	99.8	66.7	58.6	87.8
Large	0.2	33.3	41.4	124.5
All firms	100.0	100.0	100.0	100.0

*Tab. 2 - Firms size class analysis of key indicators, non-financial business economy, Italy (2005-2009).
Source: European Commission, "Scheda Informativa SBA 2012" on Cambridge Econometrics elaborations.*

	N. of firms		N. of employees		Value-added	
	(million)	(share %)	(million)	(share %)	(billion)	(share %)
Micro	3.61	94.6	7.09	46.6	180	29.4
Small	0.18	4.8	3.25	21.4	139	22.7
Medium-sized	0.02	0.5	1.88	12.3	99	16.2
All SMEs	3.81	99.9	12.21	80.3	418	68.3
Large	0.003	0.1	3.0	19.7	194	31.7
All firms	3.81	100.0	15.21	100.0	612	100.0