

# The Economic Effect of Sale of Italian Public Property: A Relevant Question of Real Estate Appraisal

Sebastiano Carbonara<sup>1</sup>, Davide Stefano<sup>1</sup>, and Carmelo Maria Torre<sup>2</sup>

<sup>1</sup> Department of Architecture, University "G. d'Annunzio" of Chieti-Pescara  
Viale Pindaro, 42, 65127 Pescara, Italy

<sup>2</sup> Department of Civil Engineering and Architecture, Polytechnic of Bari  
Via Orabona 4, Bari, Italy

s.carbonara@unich.it, davide\_stefano@hotmail.com,  
carmelomaria.torre@poliba.it

**Abstract.** In Italy, for 20 years, governments that have taken place, they tried to reduce the public deficit through the sale of part of the public property.

The results, to date, have been modest, for a set of reasons, including the difficulty of organizing appropriate sales plans. In the case of public residential properties, sales programs are easier, more complex is the case of other public goods, such as the military bases disused. In these cases, for the purpose of sale, a number of factors come into play, from the conditions in which they are places and buildings, and finally to the future transformation that may receive. A frequent mistake to place on the market these goods, evaluating the price based on the prices of goods only in theory similar compared: permeable soil sand devoid of buildings assessed as farm land, the buildings as urban property. It is not a correct approach, because the land, buildings and any other building structure present in military bases, require extensive work of transformation to be allocated to new uses.

C. Torre writes the introduction, S. Carbonara develops the explanation of the criticality of the case of study, and D. Stefano traced the assessment.

**Keywords:** Sale of public property, real estate appraisal.

## 1 Introduction. The Relevance of Italian Public Property as Economical Asset

The issue of valuation of property in public ownership has become especially important in Italy in recent years. The main reasons for this importance are at least as follows.

The first is the need to provide real estate appraisals for tax purposes of the assets of the public and private sectors to match the level of taxation on the income of real estate.

The second is related to the fact that the Italian public property is relevant, and often it is difficult to identify appropriate market values. In fact not only building services, and social housing belong to the public real estate heritage, but also historic buildings, monuments, and ordinary buildings but of considerable size.

In this kind of heritage acquired assets also are associated with unordinary characters, due to the way in which they have become public property , such as real property owned by the criminal mafia that the State confiscated and took away.

These aspects are often invoked in the political debate every time that coming and going governments have attempted to reduce some of the debt through the sale of real estate.

Any minister of the economy and the tax authorities that try to make a budget estimate of what can be the great contribution by the sale of public property made to the economy of the state and to the reduction of the debt deal really difficult to make predictions .

Generally makers produce most optimistic predictions of expert evaluators , creating additional risks and difficulties to the already difficult economic maneuvers government forecasts .

Another problematic aspect is related to the fact that not only is it difficult to give a value to the public , but it is also difficult to identify all properties that are publicly owned .

A study just prior to the last update of the laws on the land register of a sample of public ownership of the largest Italian municipalities (Fig. 1) showed that the number of buildings intended for housing and commercial offices supposedly publicly owned uncertain were more than twice those of certain properties .

Metropolitan City	Public buildings	Supposed Public buildings	Total	Metropolitan City	Public buildings	Supposed Public buildings	Total
BARJ				NAPOLI			
housing	19		19	housing		364	364
offices	12		12	offices		82	82
commercial		64	64	commercial		195	195
BOLOGNA				PADOVA			
housing	100		100	housing	35		35
offices	103		103	offices	-		-
commercial	149		149	commercial	-		-
BRESCIA				PALERMO			
housing		71	71	housing	275		275
offices		16	16	offices	55		55
commercial	4		4	commercial		131	131
CATANIA				TRIESTE			
housing		122	122	housing	200		200
offices		25	25	offices		18	18
commercial		65	65	commercial	100		100
FIRENZE				<b>Total</b>			
housing		136	136	<b>Metropolitan</b>	<b>Public</b>	<b>Supposed</b>	<b>Total</b>
offices		31	31	<b>City</b>	<b>buildings</b>	<b>Public</b>	<b>buildings</b>
commercial		72	72				
GENOVA				housing	630	322	1,652
housing		230	230	offices	184	174	358
offices	14		14	commercial	307	524	831
commercial	54		54				

**Fig. 1.** A Survey of hypothetical public property in some Italian metropolitan cities (Survey made by Valori Urbani, 2004)

Finally, the properties of public property to sell are placed in the so-called "public plan for sale and yield", which decides on the intended use they may have for individuals who buy. The public sale plan is a not flexible tool inside the market, and therefore does devalue the value of real estate for sale.

This phenomenon has been investigated in several literature cases in the past in more advanced real estate market, where those consideration rise up to the fore:

- the influence of land-use plans [1] [2]
- the difficulty of estimating prices and rents [3] [4]
- several "bubble effect" [5] [6]
- the peculiar character of Italian market [7] [8]

## 2 The Peculiarity of Military Property

The results, to date, have been modest, for a set of reasons, including the difficulty of organizing appropriate sales plans. In the case of public residential properties, sales programs are easier, more complex is the case of other public goods, such as disused military bases [9] [10].

The Ministry of Defence has granted to the Italian Government several times the selling of many military areas.

The so-called "Decree of the military barracks" of 2011, for example, permitted the sale of 76 military complexes, with a surface area ranging from 2,500 to nearly 400,000 square meters (see Tab.1 Tab.2 and Tab.3)

This decree was following after a similar law in 2004, which hypothesized the possible sale of 560 military complexes.

The current Premier Matteo Renzi in 2013, involves the reuse of the military stations for the construction of social housing.<sup>1</sup>

In these cases, for the purpose of sale, a number of factors come into play, from the conditions in which they are places and buildings, and finally to the future transformation that may receive.

A frequent mistake to place on the market these goods, evaluating the price based on the prices of goods only in similar compared theory: permeable soils and devoid of buildings assessed as farm land, the buildings as urban property. It is not a correct approach, because the land, buildings and any other building structure presenting military bases, require extensive work of transformation to be allocated to new uses; but also because it does not consider the highest and best use of land that the market can be attributed.

Another and no less important aspect concerns the urban destination of these areas, which are characterized in the plans of the municipal level as a "military zone". In Italy, the change of use planning is an obligatory act and formal power to establish a new feature compared to the previous year. Therefore, this problem also arises because the soils and buildings of the former military bases, are placed on the market with the original destination, with no guarantee that potential buyers can then operate freely subsequent changes of use. Only in the sale occurred, it will open a negotiation

---

<sup>1</sup> All these news were deeply reported in the newspaper of the National Confederation of Industry "Il Sole 24 Ore.

with the local authority to agree the change of use. All this creates a very big risk for investors.

The instrument to decide wihc public areas or real estate could be sale is the “Piano di Alienazione” (Plan for sale of public Property), where it is decided the new destination of use of the property, before of any kind of assessment or Hypothesis of best destination from the economic point of view. The instrument of the “Piano di Alienazione” is considered an instrument for urgency, and therefore is free from many form of control. For instance the Piano di Alienazione is one of the few instruments that are not submitted to the Strategic environmental assessment provided by the National and the European legislation. Therefore it is considered so urgent that it is not necessary to assess the environmental effect of the reuse of military properties. Such exemption is relevant since military properties are often characterized by the need of a de-polluting action, due to the presence of Asbestum and other chemical toxic substances in the land.

Most of these areas are concentrated in Northern Italy . It is a heritage A huge , covering an area of 6,026,249 square meters , often in the interior of the city, with about 734 500 copertti buildings with a total volume of 4,341,693 cubic meters.

Most of these areas, especially those aimed at the barracks and military housing , are dated at the end of World War II , and today are incorporated into the urban fabric.

A striking example is the “Rossani Barracks” (Fig. 1), a military area of about 100,000 square meters, located in the city center of Bari This area has been the subject of barter between the municipality of Bari and the Italian Government.



**Fig. 2.** The Area of Rossani Barracks in the core of the city of Bari

The Italian government has transferred the ownership of the Barracks to the Municipality of Bari , who sold the property in exchange for the Palace of the Prefecture and the Russian Church of St. Nicholas of Bari.

The ownership of the Russian Orthodox Church of St. Nicholas of Bari, was ceded to the Russian nation in 2008 by Prime Minister Romano Prodi to President Putin .

The value of the exchange for the abandoned area of Barracks Rossani was estimated at about 32 million. The value of Rossani Barrack, according to the estimate of the National Agency of Public Property, corresponds to the sum of value of Palace of the Prefecture and the Russian Church of St. Nicholas of Bari.

Today, the debate on the reuse of the area which is the largest property in the context of the city is built fairly open and is at the center of the municipal administration of the programs , which would make a great park , converting the buildings included in a Centre for Art and Culture [11].

### 3 The Case of Study

The case in the paper concerns a ex ammunition depot, long abandoned, located in a region of central Italy.



**Fig. 3.** The military base Area

The military base consists of a wide extension of the hilly land and various buildings (command headquarters building cafeteria, dormitories, sheds, small barracks, etc.), partly underground, destined in large part to the ammunition depot. Area also includes other structures, such as tanks and underground corridors, made several meters above the ground level.

The area has a total surface of approximately 200 hectares and is only a few kilometres from a small town. It benefits from excellent access to important road and rail infrastructure. It is very near a new industrial plant.

There are about 10,000 cubic meters of buildings, and about 80,000 cubic meters of building structures for the storage of ammunition.

As brief and largely incomplete or secret, description, available today in the military area, will allow you to say that - the state of things - they can not be sold on the market. Considered in its entirety as it appears today, the military compendium cannot have a destination other than the military.

This account covers both the soils free from buildings that the same buildings. These last, in fact, could be used for civilian purposes as they appear, because of the shape of the volumes, total or partial undergrounding of some of them, the quality of construction materials used (not excluding asbestos).

In addition, the same location of the buildings on the area, the viability of the service, the organization of space, make it completely incompatible area for other functions, other than the military.

## **4 The Institutional Assessments**

At first, the Ministry devoted to the sale of public assets, has given the military base with a market value of approximately € 11 million , to carry out the public auction. Do you know the origin of this value , as it has been determined.

Under these conditions, the auction is not successful .

A potential buyer has asked for a re-evaluation. In this second case, the Public Agency who made the estimate , proceeded according to the approach set out in the introduction. They were considered the prices quoted in public databases for agricultural land and residential real estate , industrial warehouses and craft of the village near the military base . They have been developed by applying the reduction coefficients to take account of the level of deterioration of the buildings.

The market value has been defined slightly more than ten millions of euros , reduced to little more than seven millions of euros due to the costs that will be needed for the remediation of polluted wont substances released from stored ammunition.

## **5 Alternative Assumptions for Estimating**

Considering the current characteristics of the military base, such as alternative hypotheses could be used?

The mistake so far has been to tie the estimation procedures used in the original function of the area, without considering the new features that could be attributed to it. In other words , just as it appears today, the military base could have no other use

other than that due to the Italian Army, being completely incompatible to accommodate other functions than that for which it has been used so far .

That said, it will be clear that the search for a likely market price cannot be separated from assumptions redevelopment of the locatable property, related to new activities in the area, but also considering the costs that will be incurred to restore adequate conditions for civilian use .

And ' common sense , even before the market, suggesting the evaluation of those volumes is not as marketable artifacts , but for the potential related to their rebuilding

Compared to the costs of restoration , the process of regeneration must start from the restoration of the pre-existing conditions to transformations carried out by the Armed Forces .

This means to make four preliminary works:

- trimming
- military remediation
- environmental remediation
- demolition of existing buildings.

At that point might confront alternative hypotheses of new zoning laws, in order to "hook " the urban land market to determine the value of the estimate.

The trimming is necessary as a preliminary treatment of the soil to be subjected to remediation of ordnance . Is to remove the trees and shrubs that may hinder the use of the apparatus on the detector surface to be the clean-up operation . Should be performed with caution , according to established procedures (for "fields" and "strips" of land reclamation) and appropriate method of collection of plant material removed . As a rule, is carried out simultaneously with the surface reclamation operations .

The surface reclamation is performed to search for, identify and locate explosive devices or ferrous objects buried at depths not exceeding cm . 100 , through the use of appropriate metal detector. This operation is preliminary remediation that occurs through deep drilling (at depths greater than 100 cm) , generally run in the middle of squares of side m . 2.80.

Subsequent phases of removal and defusing of the bombs remain the sole responsibility of the Army Corps of Engineers .

Concerning the environmental remediation , it represents the voice of cost more problematic to estimate . In order to proceed with the correct quantification , it would be necessary to have the results of the Study of characterization of the soil , so as to know the pollutants present and hence to define the procedures and costs of remediation . The state of current information is certainly the asbestos (derived from the shells of some buildings) and possibly hydrocarbons (arising from the storage tanks on the site). For the rest, the functions hosted in the past , one could hypothesize the presence of lead and even residues of depleted uranium. It would , in any event, mere assumptions that, given the information currently available, may not be excluded nor confirmed with certainty. In other words, the soil characterization procedure is necessary to reach a definitive estimate of the costs necessary to complete redevelopment of the site.

All these operations associated with the demolition of the buildings , generating a cost that can be estimated to exceed seven million of Euros. This is a significant figure that should be subtracted from the value defined for the military base.

## 6 Hypothesis of Agricultural Use

The premise for this hypothesis lies in the consideration that the entire area of the base, given the current configuration planning ( military area ) could have used as the only alternative agriculture. For the reasons stated above about the nature and state of advanced deterioration of the existing buildings , they cannot have another assessment if not the one linked to the cost of demolition.

The simulation carried out made it possible to define a total value of estimated related to the agricultural use of only slightly more than three million of Euros .

Of course, the estimation value so defined should be compared with the total cost of restoration of the area .

The conclusion that can be drawn is that the assessment that stems from this assumption - as completely adherent to the local market of agricultural soils and consistent with the current planning regime - does not have the requirement of feasibility on the financial plan for the buyer, less than a negotiation cost recovery , especially in relation to war and environmental remediation and costs of demolition .

## 7 Hypothesis of Partial Industrial Use

Another hypothesis considers the possibility of allocating part of the compendium of the military part of the agricultural activity and industrial production activities .

In the absence of any reference to urban planning (target , building index , size of lots, etc.), a possible approach for understanding the meaning of the enhancement of the well, is to consider the conversion of land for industrial purposes. This hypothesis is standing in close proximity to military compendium of recent industrial settlements and favorable with respect to the accessibility of major transport infrastructure , road and rail .

This assumption becomes realistic provided that the City Council recognizes and incorporates within its planning instrument volumes that currently exist , providing the opportunity to rebuilt with concentrating on a part of the former ammunition depot.

Continuing in this perspective you could think of for industrial reconstruction of about 90000 cubic meters exist today.

Considering a height of 6.00 ml of warehouses would lead to hypothesize a retail area of approximately 15 thousand square meters. At this point , based on the market prices of industrial buildings , could be defined as a percentage of the value of the impact on the value of built.

Following this principle , this would lead to a total value on the building potential of just under 2.7 million euro .

Considering the estimated value of the surface that would express building potential and the estimated value of its undeveloped assessed as agricultural , this would lead to a total value associated to this hypothesis reuse of just under six millions of euros. Also on the gross amount of seven million of restoration costs .

So it is also in this case the hypothesis punt financially unsustainable.



**Table 1.** The list of Military Properties free for sale in 2011 in Northern Italy (Source Ministry of Defense)

	Region	City	Area (square meters)	Built Surface (square meters)	Volume (cubic meters)
1.	<b>Friuli</b>	Aquileia (Ud)	47.818	3.540	23.821
2.	<b>Friuli</b>	Chiusaforte (Ud)	156.046	26.423	165.353
3.	<b>Friuli</b>	Lucinico (Go)	23.450	5.142	24.060
4.	<b>Friuli</b>	Palmanova (Ud)	10.505	3.318	19.506
5.	<b>Friuli</b>	S.Lorenzo Isontino (Go)	111.649	10.855	82.373
6.	<b>Friuli</b>	Trieste	54.985	3.838	20.139
7.	<b>Friuli</b>	Udine	91.254	16.918	202.214
8.	<b>Friuli</b>	Udine	20.256	6.495	36.595
9.	<b>Friuli</b>	Venezia (Ud)	1.987	820	16.210
10.	<b>Friuli</b>	Villa Vicentina (Ud)	19.144	5.499	32.700
11.	<b>Veneto</b>	Bagnoli Di Sopra (Pd)	59.826	7.486	28.711
12.	<b>Veneto</b>	Castelnuovo Del Garda (Vr)	23.000	4.200	36.000
13.	<b>Veneto</b>	Chioggia (Ve)	36.639	13.406	74.814
14.	<b>Veneto</b>	Dossone Di Casier (Tv)	6.236	1.600	18.780
15.	<b>Veneto</b>	Feltre (Bl)	131.280	31.930	164.300
16.	<b>Veneto</b>	Isola Rizza (Vr)	113.080	19.480	77.920
17.	<b>Veneto</b>	Padova	104.877	104.877	121.877
18.	<b>Veneto</b>	Padova	31.265	5.976	35.836
19.	<b>Veneto</b>	Padova	657.128	15.092	45.276
20.	<b>Veneto</b>	Sappada (Bl)	413.087	7.950	24.000
21.	<b>Veneto</b>	Valeggio Sul Mincio (Vr)	163.366	2.202	8.600
22.	<b>Veneto</b>	Valeggio Sul Mincio (Vr)	92.231	10.052	35.182
23.	<b>Veneto</b>	Venezia	156.400	4.000	20.000
24.	<b>Veneto</b>	Venezia	21.450	3.780	24.800
25.	<b>Veneto</b>	Venezia			
26.	<b>Veneto</b>	Verona			
27.	<b>Veneto</b>	Vigodarzere (Pd)	993	570	5.601
28.	<b>Lombardy</b>	Brescia	29.750	10.650	73.300
29.	<b>Lombardy</b>	Cremona			
30.	<b>Lombardy</b>	Legnano (Mi)	69.000	12.170	73.020
31.	<b>Lombardy</b>	Milano	10.993	3.335	16.147
32.	<b>Lombardy</b>	Milano	71.718	23.459	143.550
33.	<b>Lombardy</b>	Milano	16.066	4.336	52.016
34.	<b>Lombardy</b>	Milano	101.501	26.224	117.160
35.	<b>Lombardy</b>	Milano	28.500	10.000	90.000
36.	<b>Lombardy</b>	Milano	58.000	22.000	264.000

**Table 1.** (Continued)

37.	<b>Lombardy</b>	<b>Milano</b>	<b>36.000</b>	<b>0</b>	<b>0</b>
38.	<b>Piedmont</b>	Monteu Da Po' (To)	3.820	1.820	12.590
39.	<b>Piedmont</b>	Prazzo (Cn)	7.410	4.084	50.482
40.	<b>Piedmont</b>	Torino	19.445	7.960	122.161
41.	<b>Piedmont</b>	Torino	383.445	8.988	15.317
42.	<b>Piedmont</b>	Torino	43.461	24.500	122.225
43.	<b>Liguria</b>	La Spezia	600	600	3.000
44.	<b>Liguria</b>	La Spezia			
45.	<b>Liguria</b>	La Spezia	46.693	1.800	8.300
46.	<b>Liguria</b>	La Spezia			
47.	<b>Liguria</b>	La Spezia			
48.	<b>Liguria</b>	La Spezia			
49.	<b>Liguria</b>	La Spezia	9.913	3.844	14.424
50.	<b>Liguria</b>	La Spezia			

**Table 2.** The list of Military Properties free for sale in 2011 in Central Italy (Source Ministry of Defense)

Region	City	Area (square meters)	Built Surface (square meters)	Volume (cubic meters)	
1.	<b>Emilia Romagna</b>	Bologna	23.300	7.000	54.113
2.	<b>Emilia Romagna</b>	Parma	64.900	8.443	40.975
3.	<b>Emilia Romagna</b>	Ravenna	135.000	43.624	364.414
4.	<b>Tuscany</b>	Scandicci (Fi)	25.564	20.308	104.899
5.	<b>Marche</b>	Ascoli Piceno	8.825	3.233	44.114
6.	<b>Lazio</b>	Civitavecchia (Rm)	64.250	13.363	48.454
7.	<b>Lazio</b>	Manziana (Rm)	8.030	970	3.547
8.	<b>Lazio</b>	Roma	497.000	12.275	67.814
9.	<b>Lazio</b>	Roma	5.248	4.034	37.000
10.	<b>Lazio</b>	Roma	4.846	4.240	74.240
11.	<b>Abruzzo</b>	Sulmona (Aq)	2.421	1.391	11.292

**Table 3.** The list of Military Properties free for sale in 2011 in Southern Italy (Source Ministry of Defense)

Region	City	Area (square meters)	Built Surface (square meters)	Volume (cubic meters)	
1.	<b>Campania</b>	Capua (Ce)	74.500	2.650	32.853
2.	<b>Campania</b>	Napoli	2.500	0	0
3.	<b>Apulia</b>	Bari	53.536	24.060	181.372
4.	<b>Apulia</b>	Lecce	74.742	17.166	88.639
5.	<b>Apulia</b>	Lecce	20.949	8.245	60.000

**Table 3.** (Continued)

6.	Apulia	Montemarano (Ta)	2.448	200	3.360
7.	Apulia	Taranto	21.085	411	1.233
8.	Apulia	Taranto	533.644	45.867	400.514
9.	Calabria	Campo Calabro (Rc)	144.950	10.600	58.300
10.	Sicily	Catania	961	880	4.543
11.	Sicily	Isola Delle Femmine (Pa)	457.593	1.320	5.752
12.	Sicily	Marsala	108.000	4.430	32.985
13.	Sicily	Messina	125.830	7.760	38.350
14.	Sicily	Patti (Me)	81.860	10.811	60.570

## 8 Conclusions

In the case of the sale of military areas is required :

- estimate the costs of restoration ( decontamination , demolition , etc.).
- value assets such as land builders , who ascribe appropriate destinations and building volumes in order to cover the costs of rehabilitation and return to allow the public administration ;
- the best choice for the new use must begin with an analysis of the characteristics of the local context and economic environment in which these goods are located.

The seek for the best and highest use should be make free, despite to the indication of any form of pre-constituted sale plan.

## References

1. Alterman, R.: Takings International: A Comparative Perspective on Land Use Regulations and Compensation Rights. American Bar Association Publications, Chicago (2010)
2. Cerreta, M., De Toro, P.: Assessing urban transformations: A SDSS for the master plan of Castel Capuano, Naples. In: Murgante, B., Gervasi, O., Misra, S., Nedjah, N., Rocha, A.M.A.C., Taniar, D., Apduhan, B.O. (eds.) ICCSA 2012, Part II. LNCS, vol. 7334, pp. 168–180. Springer, Heidelberg (2012)
3. Tse, R.Y.C.: Housing Price, Land Supply and Revenue from Land Sales. Urban Studies 35(8), 1377–1392 (1998)
4. Ong, S.E., Sing, T.F.: Price discovery between private and public housing markets. Urban Studies 39(1), 57–67 (2002)
5. Rose, C.: The Comedy of the Commons: Custom, Commerce, and Inherently Public Property. The University of Chicago Law Review 53(3), 711–781 (1986)
6. Meen, G.: Regional house prices and the ripple effect: A new interpretation. Housing Studies 14(6), 733–753 (1999)
7. Manganelli, B., Morano, P., Tajani, F.: House Prices and Rents. The Italian experience. Transactions on Business and Economics 11 (2014)

8. Torre, C.M., Perchinunno, P., Rotondo, F.: Estimates of housing costs and housing difficulties: An application on Italian metropolitan areas. In: *Housing, Housing Costs and Mortgages: Trends, Impact and Prediction*, pp. 93–108. Nova Science Publ., New York (2013)
9. Van Driesche, J., Lane, M.: Conservation through Conversation: Collaborative Planning for Reuse of a Former Military Property in Sauk County, Wisconsin, USA. *Planning Theory & Practice* 3(2), 133–153 (2002)
10. Morrison, P.D.: State Property Tax Implications for Military Privatized Family Housing Program. *AFL Rev.* 56, 261–268 (2005)
11. Signorile, N., Rossani, D.: *La difesa dello spazio pubblico e la privatizzazione della città Caratteri mobili*, Bari (2014)