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# Urban relations and dematerialization of production processes

How the Covid-19 epidemic has changed society and our cities

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# Indice

Abstract	4
Introduction	5
Chapter I – The impact of the epidemic	9
1.1 The urban direction before Covid-19	10
1.2 Lockdown: economic and social shock	
Chapter II – Major spatial effects of Covid	23
2.1 Spatial disintegration of workplaces	27
2.2 Consequences on the real estate market	
2.3 Destruction of value and redistribution ?	47
Chapter III – Actions and reactions	51
3.1 Right to the city	53
3.2 The European peculiarity	56
Chapter IV – Possible perspectives	61
4.1 Spatial and economic flows	65
4.2 Towards a new identity model	70
Chapter V – Conclusions	72
References	77

#### Abstract

Cities change according to how the synergistic intertwining between society and economy moves. The Covid-19 epidemic and the consequent measures put in place to counter the spread of the virus have radically changed people's work and social habits, thus leading to a structural change in the economy and work. The prolongation of the epidemiological situation and social distancing has led to the massive application of digital tools necessary to maintain the pace of production and work within the health standards imposed.

This translates into an unprecedented dematerialization of the places where capital is managed. If previously the leasing of work, at least in Western countries, had increasingly followed a trend towards agglomeration around financial hubs / districts since the 1980s, now the trend could be reversed from the current model. Could a homogeneous infrastructural and digital network between urban centers and a regional scale dimension lead to a massive decrease in the attractiveness of FDI<sup>1</sup> in the heart of global hubs? Could this make it more likely a branching of capital management locations into a regional dynamic? This point of diffusion of the benefit could also be characterized as the only reason why the public management of a territory can facilitate, or at least not discourage, policies such as smartworking and teleworking.

Once the changes taking place have been identified, it becomes a priority to define what these phenomena entail on a regional scale. This thesis tries to find empirical evidence that underlines the aspects of change, highlighting them, and describing starting from these changes some possible guidelines that will occur in the coming years.

<sup>&</sup>lt;sup>1</sup> Foreign indirect investments

## Introduction

Facing an urban analysis of high complexity, in relation to new social developments that are difficult to quantify, it is good to set action stakes, trying to analyze an identifying portion of an urban context, assuming some principles in a global way. These global principles can only be demonstrated through an empirical experience of which the contemporary bibliography is scarce, having to approach an urban phenomenon caused by a global epidemic still in progress, at the time of writing these pages.

However, it is appropriate that the context of analysis is limited to a precise urban reality, in order to eliminate some externalities caused by a different urban history, which would necessarily lead to greater complexity due to the resulting analogies. The realities of Asian megalopolises have a development with the regional urban reality and also with society itself, which does not reconcile with the medium / large European cities, characterized by a much more stratified historical synergy, but which places them in a more consolidated structure with the reference hinterland and neighboring cities. This is not a theme that takes up the Christallerian<sup>2</sup> philosophy of central locations, but which is based on the awareness of the uniqueness of places and cities, which indeed follow similar laws, but which change in an articulated social context. It is precisely on these rules, in fact, that the plasticity of urban networks is managed, in a social and economic intertwining that changes cities and the urban in the long run.

For this reason, the proposed urban analysis is based on empirical data and urban analyses deriving, for the most part, from the Western and in particular the European context. In this case, the main analyses concern the Milanese system and the internal repercussions of the Lombardy Region, taken as an exemplary sample to analyze urban developments and the dynamics of approach to economic systems. Furthermore, the particularly marked epidemic development, which led to a prolonged, hard and very pressing lockdown on a social level, places the Lombard territory as particularly interesting from an analytical point of view, also leading to the hypothesis that in a context particularly affected by the rate of infection, the resulting relapses may be even stronger than in other areas.

<sup>&</sup>lt;sup>2</sup> Walter Christaller, *System der zentralen Orte in Süddeutschland (Teoria delle località centrali),* Germania, 1933; 5

This will not prevent references, as mentioned above, to other global realities because, if there is anything that recent urban history teaches, it is that the dynamics, albeit different, are always placed on a global framework.

The economy and technology that shapes our cities is globalist and international, and the lack of it in some areas does not place these in different logics. Global financial capitalism, driven by technology, especially digitally, places urban realities in a unique plastic crucible, in which the lack does not turn over into its opposite but rather, it is its full manifestation. Nonetheless, the analytical area mainly involves sector data and interviews, from areas of the Lombard and European reality, for simplification and for lack of objective data from other parts of the world.

Having said all this, the heart of these pages is an understanding of the urban framework that is emerging at the time of the Covid-19 epidemic, examining what has always shaped cities: production relations. Social distancing and the need for a redefinition of social rules has changed human relationships leading to a necessary alteration in the management of spaces which, for historical and social reasons, are characterized by aggregation and sociability. We have therefore come to define a new way of life of the space that has been the negation of the space of the city itself, intended as a place of meeting and exchange. This shock was immediately followed by the need for a redefinition of training and work, eliminating the spaces dedicated to these needs.

Although the potential use of smartworking and teleworking was already technically possible both in companies and in schools and universities, there was never a real possibility that this would manifest itself. This historical consequence well explained by sociologist Saskia Sassen<sup>3</sup> in the system of social opportunity falls under the assumptions of the lockdown. Since the pandemic is still developing, it is not possible to accurately predict the evolution of regulatory impositions in place, but there are economic relations that, facilitated, will hardly leave the city scene again, especially in Italy. Private companies and corporations have rated it as potentially positive in terms of physical operating costs and productivity to have a number of employees in agile work. This dynamic is suitable not only for the employer part but also for all that employed part that saves time and money from missed trips. Socialization within the workplace is not completely canceled but limited to a few occasions that significantly change the dynamics of travel.

<sup>&</sup>lt;sup>3</sup> Saskia Sasseen, Cities in global economy, USA, 1991;

It is inevitable that the fall in attractiveness of the financial hubs and also of other districts functional to the city's attraction, even just think of the university districts, corresponds to a reshaping of the price of rents in the medium term, as a lower influx into the centers can destroy component of the real estate value given by the favorable position.

Lowering the heart of the area's attractive center there is a structural modeling of prices at the city's macroeconomic level. The aim of this work is to investigate the correlation between these changes in production systems and the real estate market. What is the relationship between the real estate market and the " rate " of smartworking in a particular regional system? What impact is there on the territory outside the city? Does the change in the city real estate market correspond to a reaction in the hinterlands? How does this process affect the territorial identity and consequently the levels of attraction of the territory?

To find an answer to these three questions, an empirical research on the prices of real estate units in some particular contexts of the Milan area will be used. The Milanese case, as previously mentioned, is used as an area of analysis in order to define some objective criteria applicable to other contexts. Data will then be collected from some specific areas depending on the proximity to three main places in the metropolitan city: ex-Expo2015 area, Gae Aulenti, Città Studi / Piola. These three areas of analysis, as defined, lead to a general framework depending on the areas of new suburban settlement, of central business areas and areas with university aggregation. On this last point it is good to define that, unlike for some work and corporation realities, a more or less conspicuous part of the students not only actually returned in September 2020 to the classroom, but shows contrasting percentages on the will to return to the classroom. If in the first weeks there was a clear resistance<sup>4</sup>, then the sensitivity was reversed with the perspective of mixed teaching, albeit in the awareness of pockets of inequality.<sup>5</sup>

At the same time, there is a considerable increase in the request for admission to tests in limited number courses throughout the Italian peninsula, with few differences between the North and the South, in relation to the fact that the physical block dictated by the distance from the University and the quota of spaces fell. To cite a few examples, the State University of Milan has seen requests grow by 21.5%, in line with many universities throughout Italy, albeit unevenly. In fact, there are

<sup>&</sup>lt;sup>4</sup> CISL-scuola, *Dossier D.A.D.*, Italia, 7 April 2020;

<sup>&</sup>lt;sup>5</sup> Censis Report, Italia sotto sforzo: Diario della transizione 2020, Italia, 9 Giugno 2020;

universities with considerable increases, over 60%, and universities where the increase is more contained.<sup>6</sup>

In this framework, a territorial redefinition of the relationship with the central locations of which one has the will to calculate the intensity will be outlined. The quality of the events derives from their quantification, and consequently, the outflow of capital and people also determine a qualitative fate of cities. The reflection of these opportunities focuses further on the issue of territorial identity, strongly proposed also in the regional analyses of the European Commission<sup>7</sup>, being an essential indicator with regard to territorial competitiveness. How will the dematerialization of production processes relate to this indicator? How will urban analysis methods be affected? These questions are far from secondary in defining the future impact that city networks will have on the world and regional economy, especially in Europe, where the presence of a strong identity network is the basis of local economies of scale.

8



<sup>6</sup> Studenti, impennata delle immatricolazioni, Corriere della Sera, Milan, 1 October 2020;

<sup>&</sup>lt;sup>7</sup> Report European Commission, *La politica di coesione guarda al futuro*, Bruxelles, 2017;

<sup>&</sup>lt;sup>8</sup> Photo exibition of Tomás Cajueiro, *Dal vuoto al volto*, URP Torino, 2020;

# Chapter I - The impact of the epidemic

The epidemic impact caused a global revolution in every sphere of action. The whole world has found itself in the situation of completely changing the macroeconomic plans and forecasts that up to that moment were the solid basis of investigation of the future and of society. The disintegration of certainties has produced positive and negative implications in the economy, as well as in finance; but above all it made the economic fabric and politics aware that the evolution of time was certainly not deriving from an immutable need defined by economics and technology. Indeed, this crisis has decreed that the " black swans " are not a peculiarity of a particular parenthesis but are all-encompassing, as well as cyclical. Just think of the fact that we have been so affected by an epidemic that, unlike many other diseases, fortunately has a relatively low lethality. The opulent and connected society of the 19th and 20th centuries had never encountered situations of necessary change due to an epidemic at least from the Spanish flu in the early 1900s.

This has led to a new definition of something perceived as an externality, but which has been a constant within the world history of human civilization. Often epidemics, from plague to cholera, swept cities and swept away entire generations and entire neighborhoods. The very word " quarantine " derives from the forty days that Venetian ships had to wait inside the lagoon but outside the city center before unloading the goods. A prevention that suggests how natural and necessary it was for humans to deal with diseases that distorted people's lives and their relationship with the territory, the place and the city for months. It is no coincidence that in the Decameron, Giovanni Boccaccio sets the imagery of the novel in a country house where ten young people gather to escape the Florentine pestilence of 1348.<sup>9</sup>



<sup>9</sup> Luigi Baccio del Bianco, La peste a Firenze nel 1630, Museo della Misericordia, Florence, 200x240 cm;

This literary reference suggests that the drives that move the escape from the aggregation of cities, by their nature predisposed to the spread of infections, modify the spatial habits of people. There is, however, a substantial difference between the past epidemics and the current one, which we can find in the will of the technical power of the modern world. This difference is inserted in the potential dynamics of changes in labor and production relations. The power of technology has long made it possible a growing disintegration of the physical places of production and management of capital, from which the end of the city has been discussed for some time, both in its aggregative conception of capital and its disintermediation deriving from concentration<sup>10</sup>, also in recent eras<sup>11</sup>.

# 1.1 The urban direction before Covid-19

The first process can be described in the general framework of financial capital and the growth of economic and financial assets within global hubs. Global cities, in fact, behave as hotspots for the management of relations and services in close synergy, useful for the regional or global management of the production processes of goods and services. An important fact is in fact the awareness of the decrease in industrial productive power in western global cities starting from the 1970s, a movement that has contributed to increasing relocations but above all to a re-orientation to work on the part of services.

The spatial economy in the business centers already hypothesized by Lefebvre<sup>12</sup> in the wake of the dynamics of expansion and disintegration of the urban grid, take hold and develop contrary to the main academic discussion of the time, which hypothesized the progressive deterioration of cities in favor of the suburbs and different housing and aggregation models. The whole architectural setting of the time is therefore manifested in its global poverty, as it is focused not on the creation of punctual solutions at the urban level but on a structuring of city life that has its center in the de facto functional man-machine dimension.

The modernist vision, which not too covertly draws some foundations from the almost exquisitely Italian experience of futurism, therefore arises as itself destructive for the city. Just think of the great urban projects envisaged by the leading interpreter of the architecture of the time: Le

<sup>&</sup>lt;sup>10</sup> Sidney Glazer, *Detroit*, Ed. Bookman As., USA, 1965;

<sup>&</sup>lt;sup>11</sup> Leonardo Benevolo, *La fine della città*, Ed. Laterza, Milano, 2011;

<sup>&</sup>lt;sup>12</sup> Henry Lefevre, *Le droit à la ville*, Paris, 1968 ;

Corbusier.<sup>13</sup> Functional city models take away the heart of economic aggregation, which is characterized in our time, above all, as the prerogative of cultural capital, deriving from the "contamination " of the city and not exclusively from a replication of the laws of production. The overt, or ongoing, failure of some specific urban planning policies derives from the lack of growing and multidirectional urban mobility, especially at a social, residential and productive level.

In fact, since man began to build villages and cities, the entropic force of mobility has always been constantly growing, in turn closely linked to the technical aspect of city evolution. If in the Middle Ages the Black Death took 10 years to transit from Asia to Northern Europe, the Spanish flu of the early 1900s took a few months. The Coronavirus had a global spread within a few weeks.

The spatial interaction of urban forces with mobility was able to take place thanks, it was said, to the increase in technical capacity, a determining factor for the economic and social growth of agglomerations and territories. Economic growth itself is often explained in modern bibliography by endogenous phenomena that derive from the spatial assumptions that create them<sup>14</sup>. From this derives the relationship between the characteristics of a territory and their correlation with the possibility of technical development which in turn determines its economic destiny.

The vital recipes for global cities are currently oriented towards a capitalist-financial management based on income that makes the links of finance, logistics and real estate participating in a flow management dynamic. If the first is based on a ten-year (or secular) urban settlement management of capital, the evolution of logistics always draws its foundation from human accumulation within cities; real estate, on the other hand, has evolved more in recent years and, as previously stated, has changed its qualitative connotations based on the increase in its financial use.

The real estate value, in fact, represents first the commercial side and then the financial one of the production processes, which participates in both the initial and final stages of the building process: initially as a credit and subsequently at a financial level, relying on a real consideration.<sup>15</sup>

But if this process is dimensioned in larger scales, unhinging it from the real basis and qualifying it as an asset with increasing value, then the relationship between capital and the real process of production is reversed.<sup>16</sup>

<sup>&</sup>lt;sup>13</sup> Le Corbusier, The City of To-morrow and Its Planning, Francia, 1929

<sup>&</sup>lt;sup>14</sup> Paul M. Romer, *Endogenous Technological Change*, Chicago, 1990

<sup>&</sup>lt;sup>15</sup> David W. Harvey, *Rebel cities: from the right to the City to the Urban Revolution*, New York, 2012;

<sup>&</sup>lt;sup>16</sup> David Ricardo, *Essay on the influence of a low price of corn on the profit of stock;* 

This makes, and has made, cities an integral part of an economic process, which therefore no longer takes the form of a Ricardian dynamic as the mere possession of a non-reproducible<sup>17</sup> asset but an instrument for extracting profits. The internal capital management processes have shaped some cities (similarly like industrialization to quote Lefebvre<sup>18</sup>) in a preponderant way, while for others it has not been so impactful.

This does not define an area of "luck or bad luck". On the contrary, the only way for the city system to be competitive and attract investments and development derives solely from its total immersion in a global context in which the possibility of Nation States' decision is limited, often referring to the mere executive sphere of guarantor of stability. Take for example the disruptive force with which investments have revolutionized the face of Lagos (to quote a third world city), the economic capital of Nigeria, with the creation of a new expansion platform on the ocean, detached from the rest of the city, ready to host business centers and luxury buildings: a base for accessing the African market. In this process there are, as always, losers and winners and often the losers are more numerous than the counterpart.

# Spatial location of the residences

The location of the houses does not derive only from the classical theory of a hypothetical market area but in fact sees the introduction of an additional variable deriving from the size of the house.<sup>19</sup> The residential model is therefore based on three variables: size of the house, the cost of the land, distance from central locations / transport costs. Following William Alonso's model, therefore, the residential location variable can be expressed in the following function:

Utility=u (distance"d"; house dimension"g")

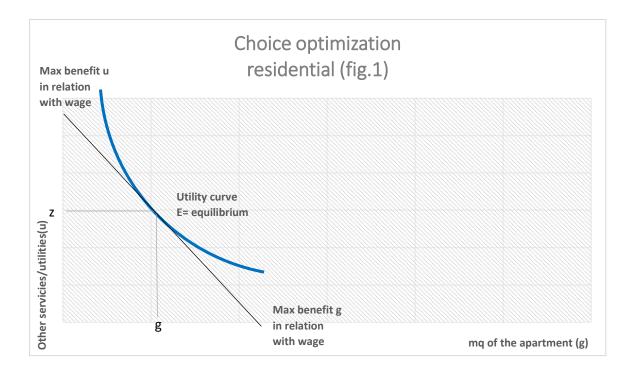
U=U(D;G)

Where d depends on the interaction of individual attractions (work, services, etc.)

<sup>&</sup>lt;sup>17</sup> Michele Grimaldi, *La macchia urbana*, Naples, 2018;

<sup>&</sup>lt;sup>18</sup> Henry Lefebvre, *Espace et politique*, Paris, 1972

<sup>&</sup>lt;sup>19</sup> Roberta Capello, *Regional economics*, Il Mulino, 2004;



This classic setting of residential positioning in urban contexts allows us to place ourselves in an analytical perspective with regard to metropolitan settlements and in the hinterlands. There is therefore an equilibrium correlation between the economic possibilities, the needs of the individual and the location of the distance from the central locations.

This awareness places us in the analytical condition for which the specificity of a location depends predominantly on the proximity to a series of services and, in particular, on the proximity to the workplace. The increased incidence of the phenomenon of smartworking, which will be explored in the following chapters, drastically changes the relationship of distance, increasing the characteristics in the new workplace: home.

But how the urban context behaves will depend on the "rate " of agile work within the individual regional contexts. The location of housing in urban areas derives in fact from various factors that change according to the context of the city and the structure of the internal labor market. Starting from an analysis in the peripheral centers or in the " countryside ", the location derives from some preponderant factors.

The first is the availability of goods on site. if person x has the availability of a house in their place of residence, in a market that is often much less mobile from a real estate point of view, it will lead to a preference for a house on site. and the search for work in the area. Only in the event that the economic possibilities offered by the territory are not favorable, or in the event that the cost of transport is no longer on the utility line, the person in question will tend to move. In this case, those who do not have the possibility to transfer work at home will be more penalized because if they do not have a house on new rents of greater demand, their home could lose value despite some architectural features are not necessarily useful to him / her.

For those who can carry out a total or partial smartworking activity, the movement could take place only if the services offered by other parties are superior to those of the place of residence or if there are no mobility problems due to family network, and this is a prerequisite to be taken into consideration, in countries such as Italy, in particular.<sup>20</sup> This is because in modern localization one cannot often ignore the network sectors which, especially in Italy, are often still anchored to very strong social networks.

Mainly in areas of high mobility this ratio significantly decreases its intensity and the part of utilities becomes more focused on distance and urban services. Our cities are in fact marked by a central and particularly lively economic and cultural possibility, with high involvement capacities and which makes the issue of urban access relevant. Nonetheless, there is an increasingly massive loosening of various segments of the population from urban contexts with discriminants that are mainly income-generating and to which, consequently, others (ethnic, cultural, etc.) can be added.

## Suburbs and global cities

Once the panorama of housing settlement has been contextualized in macroeconomic terms, however, it is necessary to take a step back and see as a whole the functioning and apparatus of urban planning and the global economy within the contemporary world.

The urban economy is in fact inextricably linked to both space and time, with the latter often overwhelming certain spatial conditions<sup>21</sup>. However, if the temporal context cannot be varied quantitatively but at the most qualitative level, space can be modified both in quantity and quality.

This push for spatial compression aimed at instantaneously reaching places and spaces is a constant in human history, achieved both with infrastructures and techniques for transporting people and goods (railways, ports, roads), and with digital tools for the transport of data, information, capital

<sup>&</sup>lt;sup>20</sup> ISTAT studio, *La popolazione, le reti e le relazioni sociali*, 2018;

<sup>&</sup>lt;sup>21</sup> Alfred Marshall, Industry and Trade, London, 1919;

and financial products. In a dynamic in which a disconnect is created between the digital and infrastructural part, there is a prevarication of financial and digital instruments on physical assets.

This acceleration underwaying since the information revolution has laid the foundations for the urban change of our time. It is therefore good to analyze the two products (and actors) of the present: global cities and suburbs.

Global cities entered prominently within the global economic context starting from the 1970s. It is undeniable that throughout the span of modern and ancient history there have been cities that better than others were able to attract population and therefore trade and wealth, but it is starting from the growing interconnection that we begin to talk about globalization and, consequently, of global cities. They are characterized by a dense network of relationships and intertwining that make them more similar, due to the preponderance of dialogue with transnational markets, to other global cities compared to the local or regional environment.

These changes have contributed significantly to the development of globalization and financial growth. But if on the one hand we are used to seeing global cities as the protagonists of the contemporary world, perhaps it is useful to propose an inversion of interpretation, positioning them as tools in the hands of the financial economy <sup>22</sup>. But if on the one hand we are used to seeing global cities as the protagonists of the contemporary world, perhaps it is useful to propose an inversion of interpretation, positioning them as tools in the hands of the contemporary world, perhaps it is useful to propose an inversion of interpretation, positioning them as tools in the hands of the financial economy world, perhaps it is useful to propose an inversion of interpretation, positioning them as tools in the hands of the financial economy which has created and finds logistic outposts in the central locations of the global cities, which in turn re-propose a Christallerian dynamic on a planetary basis in a multilevel perspective, each with its own characteristics, but at the service of international capital<sup>23</sup>.

This use always manifests itself starting from the reflection of Saskia Sassen, who corroborates the intuitions that, more than a decade earlier, in the 70s, came from Henry Lefebvre's headquarters. The global context has reached levels of complexity such as requiring a network of financial centers to make capital operations possible. There is therefore a predatory use of the economy of management logistics centers, which disrupts a territory or a city in a not very different way from how campaigns are attacked today by a multitude of logistics centers serving the advance of ecommerce.

<sup>&</sup>lt;sup>22</sup> Peter J. Taylor, World City Network: a global Urban analysis, UK, 2004

<sup>&</sup>lt;sup>23</sup> Saskia Sassen, *Cities in a world economy*, USA 1991;

But if on the one hand the new economic model shapes the cities in the territory due to the logistic centers of intangible management, on the other the same cities in a very Hegelian dynamic try to abstract from epochal changes by placing themselves in a conservative perspective in new work developments. It is good to keep in mind, in this small parenthesis, the references to the return to work in the office by Mayors and politicians <sup>24</sup> who draw a representative and relational basis within the context of the global city. The resulting growth has often proved to be providential<sup>25</sup> for many urban centers, albeit in a distributional way that is often very different. The other contexts which will now be discussed are created on this discrepancy: the suburbs.

Urban spaces are in fact pervaded by two different types of drive: the first is a constant competition (single but which becomes a system, even at a political level) with other global cities to attract FDI<sup>26</sup>, increasingly unhinged from a national or regional context, on the other hand, a profound competition in the urban area due to the emergence of inequalities dictated by the destruction of now inhomogeneous production schemes. The peripheries are therefore places that lose the capacity for action of social actors and institutions<sup>27</sup> and see the opportunities for life and relationships worsen. Peripheralization is therefore a process that is synergistically spatial and economic and is structured in an economic destruction of spaces, from the forms of work, to the growing insecurity or, on the contrary, to the development of gentrification.

There is in fact a double aspect that acts within the urban grid both on the lower and upper social classes, which is the urban disruption of the network, both based on massive gentrification and on the creation of gated-comunity and on the marginalization of working class and working-class neighborhoods. The functional and nihilistic separation operated within the city mesh or its contrast with the countryside areas led to a spatial segregation that was appeased by the whirling economic back and forth, assumed as urban vitality despite candidly presenting its internal contradictions of social classes that they lived (did not inhabit) the same space. This feature develops because the preponderance of the economy and technology occurs over space, which is subjugated to the uses of capital.

The covid, most likely, has done nothing but accelerate dynamics already in place, reducing the strength of financial districts, modifying the social impact of cities and placing housing as the

<sup>&</sup>lt;sup>24</sup> La Repubblica, *Ripartenza Milano, Sala: "Basta smartworking, torniamo al lavoro."*, Milan, 19 June 2020

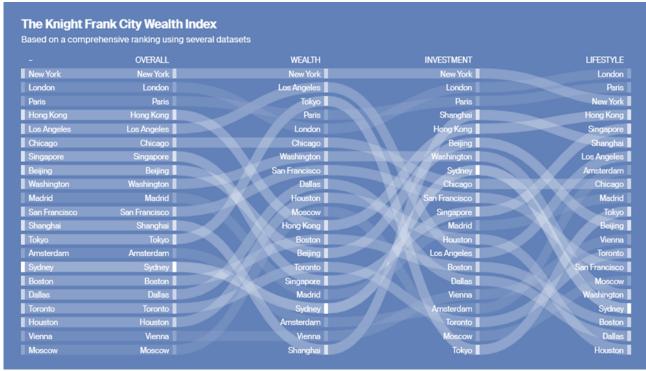
<sup>&</sup>lt;sup>25</sup> Edward Glaeser, *Triumph of the city*, 2011;

<sup>&</sup>lt;sup>26</sup> Foreign Indirect Investments;

<sup>&</sup>lt;sup>27</sup> Agostino Petrillo, *La periferia nuova*, 2018;

ultimate goal for localization, in a dynamic in which they are no longer services and work attract people and residential locations, but it is also residences that attract logistical bases and positioning for the delivery of services and products.

These contradictions emerged in a predominant way during the lockdown of spring 2020, in which the empty and gloomy historical and financial centers counterbalanced the living suburbs but finally aware of their own housing problems and urban distortion of services. Since in the era of globalization people live in places but the space of power is defined by flows, these urban meshes have perhaps become more aware of their own needs.<sup>28</sup>



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<sup>&</sup>lt;sup>28</sup> AA.VV, La città per l'uomo ai tempi del Covid-19, A cura di Massimiliano Cannata, 2020, Rome;

<sup>&</sup>lt;sup>29</sup> [Fig.1] Knight Frank, Oxford Economics, RCA, Forbes, *Global cities index*, 2019;

#### 1.2 Lockdown: economic and social shock

All the economic and first social scaffolding on which the foundations and pillars of our world were built have been undermined by the arrival of a global pandemic which, precisely because of interconnection, has spread easily throughout the planet. If the plague of the 14th century took 10 years to cross Asia and Europe, leaving death and despair behind them, the Spanish flu took a few months while Covid-19, embarking on any international plane could spread in any corner of the world within 48 hours.Precisely the ability of this virus to be more effective where speed, interconnection, economy (and probably also pollution) express all the strength and contradictions in the urban grid, has brought the entire connection bases of the being social and economic.

Cities were the main vehicles of the contagion and, as the epidemic reality unfolded, their own structure refused to identify the problem, precisely to avoid the destruction of that global ranking that makes a particular metropolis competitive with respect to another. Here then are the citizen calls to the need not to stop production, work and consumption; often masking the strong and structured social core of the city with futility, as if an aperitif, a restaurant, an open office were the heart of the city.

A place that is not a place, which is defined in places and speed, but which is slow to find processes of commons and urban life based on awareness. We observed the various references to the " city that does not stop " at the same time when the productive economic sector was observed trying to reassure its European partners on the stability of the Italian situation<sup>30</sup>.

Suddenly we were overwhelmed by an emergency that meant the end of a method of production and work. The physical distancing that then becomes social revolutionizes the city, interrupts the network of contacts and formation inherent in the essence of the city and the urban, destroys the chain of contamination and places the urban mesh at the mere mechanical service of a place of consumption and production of base. The " first necessity " activities become the only necessity.

The relationship with the places of aggregation, culture and services cease to exist, turning into nostalgic urban skeletons that can no longer be used as they are organically contrary to the new social disposition. The home becomes the predominant and essential role of personal and work exchange (for those who have it and for those who can), often mediated by a computer.

<sup>&</sup>lt;sup>30</sup> Message to the European partners of Confindustria Bergamo, February 2020;

Therefore, technology is strengthened, becomes totalizing, increases its efficiency, guarantees economic development but this time in an even more destructive dynamic of human reality and of city development.

If before the technique dictated economic development through the global hubs of cities, now it dictates the development of the global economy in a series of infinite private places, for which space is less and less important and fundamental, falling career prospects and possibility of the contamination placed at the base, also by Sassen itself, of the development of the directional downtowns. It is a fact that epidemics and crises modify cities, but we are faced with an unprecedented scenario in which the needs for the production system and the social structure have been organized in such a way as not to foresee the possibility of such a large fluctuation. The reduction of error and residual time have created a chain in which nothing could be stopped.

The block imposed has upset habits and consumption and, although some of these changes may have a momentary power, it is not taken for granted that there are accelerations related to processes already underway for some time. Some of these processes can be seen in the sectors that more than others have been modified as a method of use. There is no mention of surrogate activities from physical to online, but of change in consumption and production relations. The first is the retail sale of most non-food items.

In the UK, access to retail stores in April dropped 85%, while online shopping increased by 58%, reaching a record 70% of total non-food purchases.<sup>31</sup> In Italy, e-commerce growth is expected, in 2020, of 26%, this is a very high percentage, especially for a country with a low previous level compared to the European average.<sup>32</sup>



<sup>31</sup> www.am.pictet.it – blog, L'impatto della pandemia di COVID-19 sulle città, Settembre 2020;
<sup>32</sup> B2c Observatory datas, Politecnico of Milano;

Politecnico di Milano, Master Degree Course in Management of built environment - Degree Thesis by Gabriele Giudici

The second data that emerges from the B2C Observatory is that while the most historically mature sectors in the e-commerce field are increasing at a sustained rate but in line with the increase in previous years, those that are giving the greatest boost are the emerging sectors, such as food & grocery (+ 56%) and furniture and home living, (+ 30%). The overall figures speak of about 4.7 billion euros of increase for 2020 in e-commerce purchases in Italy, figures that give a good idea of how much digital purchasing is now one of the favorite systems, facilitating the decline of the classic Retail.

It is useless to point out the enormous urban impact of this change, especially in the peripheral and rural areas where not only the small historic centers will remain less and less populated by commercial structures, with the risk of a deterioration in the quality of the livability of the meeting places, but also the presence of significant urban voids due to the ruins of shopping centers and retailers, will be unable to be reinvented in different management or uses. Retailers, in fact, seem destined to quickly turn into warehouses for online orders, whenever possible. Retailers who enjoy popular locations or who offer leisure experiences or integrated services will continue to act.

Another sector at the center of the covid-19 shock is certainly that of offices, whose role is likely to be greatly reduced due to COVID-19. The situation of prolonged smartworking (already foreseen for all 2020 and beyond, by some companies<sup>33</sup>), has led to an epochal change in employment relationships, transport flows and the liveability of the cities, to the point of leading to residential real estate, integrating with it.

Similarly, all those residential services for students have also suffered the same effect, with a rampant decrease in urban centers due to the uncertainty brought by the virus and the exponential use of distance learning. We thus plunged into a situation that gradually manifested itself in all its historical power.

The trend towards urbanism will hardly be reversed, since in history cities have always responded to changes with changes, showing high adaptability and in which, following a law that could be defined as " Urban Darwinism ", the center or the urban centers more capable of changing around the new needs are the winners in the competition for the global index. Comparing the present with the past we could take note of the fact that it is multidisciplinary, stratified, (and often historical) cities that prevail in a regional or global context.

<sup>&</sup>lt;sup>33</sup> Repubblica.it, *Google: dipendenti in smart working fino all'estate 2021*, 27 Luglio 2020;

This is because a structure composed of different areas of urban development (today finance, industry, culture, innovation, green economy) is often more resistant to the collapse or crisis of one of these pillars. Think of the cities of first and second industrialization and their consequent swirling urban shrinkage in the era of post-industrial society and relocations.<sup>34</sup>.

Although some cities are more robust, the pillars of resilient cities are undermined differently depending on their impact at the market level. If smartworking and financial flow go on, as well as food and a part of entertainment, with a preponderance for the deferred, so do not those places that are themselves an integral part of the city as part of the meeting (museums, theaters, cultural centers, social centers, clubs). A structure centered on consumerism thus emerges, a structure that there is no possibility to counterbalance with an aggregation that is different from these schemes.

In a cinematic scenario, cities manifest themselves only in their functional and economic meaning, losing the charm of the encounter, brought to a mere nostalgic image of a past that used to exist. Technological rationality, which impoverishes aspects of contemporary life, has developed the material basis of human freedom while serving repressive interests.<sup>35</sup>

Hence the city is emptied of those presuppositions of a cultural aggregative character, transforming itself only into a large technical-economic apparatus aimed at maximum production with the least possible use of aggregation due to the risk of contagion. Obviously, changes that become social correspond to macroeconomic changes in the short and long term.

<sup>&</sup>lt;sup>34</sup> Philipp Oswalt, Shrinking cities, international research, 2005;

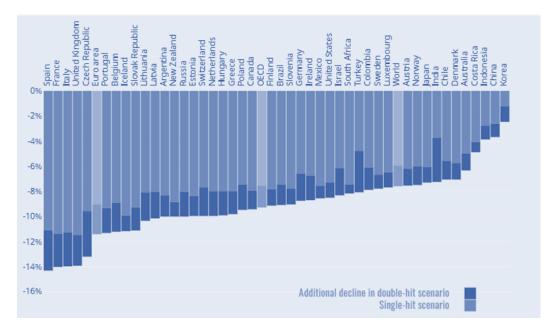
<sup>&</sup>lt;sup>35</sup> Herbert Marcuse, One dimensional man, 1964;



<sup>&</sup>lt;sup>36</sup> [Fig.1] Urban Installation, *Quel che resta del bene*, Bergamo, July 2020. Credits Giovanni Diffidenti;

#### **Chapter II - Major spatial effects of Covid**

The macroeconomic changes resulting, on the one hand, from this situation of spatial disintegration of workplaces and, on the other, from the hyper-localization of consumption and the housing dimension, has led to important changes in the economic situation. First of all, it is good to analyze the economic, financial and productive development of various countries, to arrive at a consideration of how the global economy has evolved in the epidemic curve. Starting from an analysis of the flows of the stock financial markets, we witnessed in the first phase of the epidemic, a moment of strong turbulence which, at a global level, was reflected in an element of volatility with a preponderance of large declines.<sup>37</sup> The impact was different according to geographic areas and sectors, depending on the exposure to the pandemic and the effects of the lockdown<sup>38</sup> measures, sometimes falling below the values recorded in 2007. Even the markets for bonds issued by companies' private individuals experienced a drop in prices, which in some cases was greater for Italy.<sup>39</sup> The pivotal companies in the development sector in 2020, the hi-tech companies, mainly linked to e-commerce and data, the real protagonists of our era, also with respect to urban dynamics, leave this analysis framework<sup>40</sup>. The real economies of the states, heavily hit by the necessary closures, will close 2020 with record declines, which are more marked in interdependent and advanced economies such as those of the G7.41



<sup>&</sup>lt;sup>37</sup> NASQAD Index Composite on 19th February 2020 was 9.817 points. On 23rd March 2020 was been falled at 6.860 points. A fall 30% in only one month;

<sup>&</sup>lt;sup>38</sup> FTSE MIB index in the period 19th February – 23rd March 2020 had been a fall of 40%;

<sup>&</sup>lt;sup>39</sup> Consob, La crisi covid-19. Impatti e rischi per il sistema finanziario, Milan, 7 July 2020;

<sup>&</sup>lt;sup>40</sup> Maurizio Valsania, *Big tech batte le attese di bilancio, guidato da Amazon e Alphabet*, Il Sole 24 Ore, 29th October 2020;

<sup>&</sup>lt;sup>41</sup> [Fig.1] Organisation for Economic Co-operation and Development (OECD), based on World Bank analysis;

With the prospects of a record decline in employment, expected as early as February 2020 with the pandemic not yet underway, and manifested in all their drama now, the National States have had to run for cover to safeguard an economy that, unlike that of 2007, risked to manifest itself in a very short time and with real and strong repercussions on the real economy. Central banks have invested a huge amount of liquidity in response to the crisis, which is enormously swelling world debt. This is soaring and according to the International Monetary Fund at the end of the year the bonds of advanced economies will exceed 120% of GDP<sup>42</sup>. In summary, the coronavirus has produced in a very short time the same amount of public debt that has been accumulated in twenty years. Analyzing the Italian case, it can be seen that from a three-year stagnation of the Debt / GDP due to a substantial block in growth combined with an adequate budget balance, we arrive at an explosion of the debt which in 2020 is expected to reach peaks of 150% if not higher, due to the vertical collapse of growth combined with strong public spending to safeguard the economy.<sup>43</sup>



It is a fact that throughout 2020 the Italian economy has been largely supported by the state, not only in terms of fiscal policies but above all with regard to labor policies, the state has made itself the guarantor of social stability through huge donations from economic companies which largely subsidized the redundancy fund in derogation. It will be necessary to understand how the world market will respond in the medium term to a situation also of economic reprogramming, since global

<sup>&</sup>lt;sup>42</sup> FMI, World Economic Outlook, April 2020: The Great Lockdown, April 2020;

<sup>&</sup>lt;sup>43</sup> [Fig.1] ISTAT and Banca d'Italia, DEF 2020;

uncertainty and the rate of goods subject to duties (increased in recent years) will certainly change the markets that are major importers and exporters.

The strong and growing indebtedness due to the Covid-19 emergency could be kept under control if there were an adequate development of world demand, capable of pushing consumption and post-crisis growth in a solid and robust way. This prospect risks instead of remaining alone, only a hypothesis, because of the considerably reduced purchasing power for families and the middle class; this situation should lead to measures aimed at pushing demand progressively on large assets, which however, except for some rare cases, does not seem to be the immediate intention of governments.<sup>44</sup> This joins the trend of large companies taking advantage of the situation, since they are issuing large quantities of bonds, with the sole aim of obtaining additional liquidity and not for investment purposes.

The 2020 Economic and Financial Document reads:

In 2019, foreign direct investment (FDI) decreased by 6.0 per cent in advanced economies, with a contraction of 15 per cent in the EU, due to strong volatility between countries; robust increases in Germany, France and Ireland go hand in hand with contractions in the Netherlands and the UK. In the United States, inflows remained almost stable (- 1.0 per cent). Among the Asian countries, FDI grew in Japan (9.0 per cent), while in China they were stable compared to the previous year (equal to 140 billion dollars); India recorded a 16 percent increase. In Latin America, there was an increase of 26 per cent in Brazil, with positive results also in other countries (Peru, Chile and Colombia), contrasted by the marked reduction in Argentina. Without any doubt, this policy has made it possible to avoid series of failures that would have dragged the world into severe crises, in different periods (1929-2008) <sup>45</sup>. However, there is doubt that this issue of money, decided to save what can be saved, in this crisis like the previous ones, often contributed to inflating financial and real estate values, benefiting the richest, without reducing the structural problems of the real economy (above all the Italian one, permeated, in fact, by scarce investments).<sup>46</sup>

In summary, if at the beginning of 2020 the starting conditions seemed in some ways not excellent but certainly promising, the Covid-19 epidemic has completely overturned the paradigm <sup>47</sup>. The

<sup>44</sup> T. Piketty, Capital and ideology, 2019

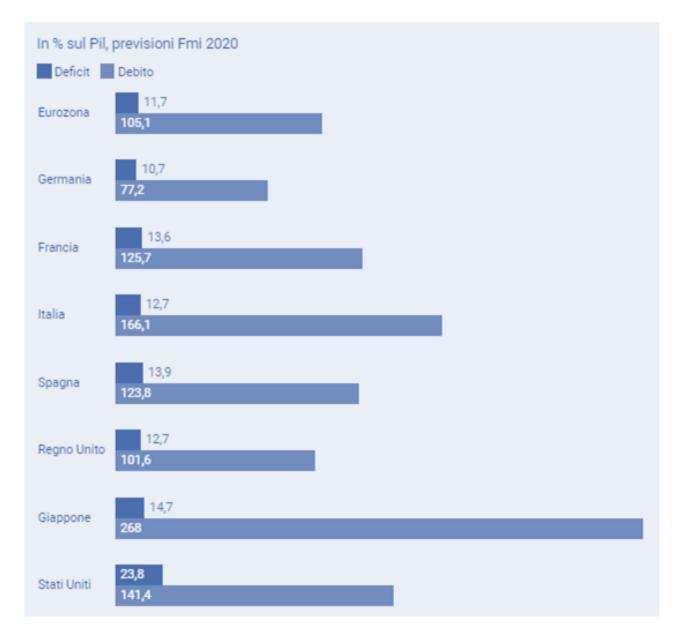
<sup>&</sup>lt;sup>45</sup> UNCTAD, Investment Trends Monitor, January 2020

<sup>&</sup>lt;sup>46</sup> T. Piketty, *The era of green money*, Internazionale, 30th May 2020

<sup>&</sup>lt;sup>47</sup> DEF 2020, [pag.26], 24th April 2020

productive activity has undergone an unprecedented collapse, dragging the entire labor sector with it, the States have been forced to massive liquidity interventions, which has led to extreme indebtedness that exposes the advanced world in the near future either to a redefinition of the rules debt management or to a substantial progressive deterioration of their economies and, in particular, of welfare.<sup>48</sup>

These enormous economic changes have led to an immediate change in employment policy, having to adapt to the pandemic world. These qualitative changes in the world of work, becoming quantitatively high, have led to changes in the relations of production between different urban places.<sup>49</sup>



<sup>48</sup> T. Piketty, *Capital and ideology*, 2019

<sup>&</sup>lt;sup>49</sup> Percentuale di deficit su Debito/Pil, FMI, elaborazione il Sole 24 Ore

#### 2.1 Spatial disintegration of workplaces

A phenomenon that increases quantitatively changes qualitatively, and above all relates to changes in processes and the structure that surrounds it. By examining the world of work, we can trace general lines of analysis that are structured on the one hand in the immediacy of the contingent action of the imposed rules, on the other on the long-term developments that new forms of work can have in the post-pandemic world. Often these are projects already in progress, which intersect with a basic philosophy that examines the different forms of direction in relation to technical tools. The technique, on which the economy depends, and which feeds it, does not question itself politically about the results in the Macchiavellica dimension in which " the end justifies the means", but instead the means justify the ends. What the technical instrument therefore makes technically possible then lays the foundations for achieving the ends. Taking into consideration the changes in economic relations, it immediately becomes clear, as already analyzed, that the main sectors that have benefited from the situation are those of e-commerce and high tech.

#### The acceleration of e-commerce

In these sectors, in addition to a quantitative increase in production, there was a further request for unionisation and protection (think of all the age-old working situation of the riders), proving that an increase in personnel dedicated to these sectors has attracted more attention to a phenomenon that is no longer marginal. We therefore have, on the one hand, these examples in which we can see an orientation towards the qualitative improvement of employment relationships even if on the other we encounter a universe of small VAT numbers and traders who do not have the possibility of reacting to the new systems of consumption at home. Here, too, we are dealing with displacements already underway, dictated by the technical possibility of action, although often the implications can be bad. It is about two factors in particular: the environment and the urban; the first derives from the increase in emissions caused by logistics in the complex of transport flows. Generally, the balance could be negative if you think that the courier can simply replace the private car, but often the items purchased are only a few units, which leads to repeated steps with exponential increases in emissions. Similarly, a lack of urban planning that can standardize these logistic centers of capillary management, apart from some examples of virtuous planning in some interchange centers, leads to a fragmentation and proliferation of small and large logistics warehouses that disfigure even more already compromised landscapes: they are inserted in peripheral environments but already provided by infrastructures. As for the urban, the abandonment of historic centers or the residues of unsustainable markets or shopping centers leads to further urban wear from the point of view of aggregation and liveability, with consequent economic deterioration that often leads to social deterioration.

#### The smartworking

The biggest and most powerful process of changing work environments in 2020 and following years is certainly smartworking, already mentioned and which now deserves an important study. First of all, it is good to specify that there are different types of what, even in the Prime Minister's Decrees aimed at combating Covid-19, is called " agile work ". There are in fact two main areas: teleworking and real smartworking. The first replies in all respects to the office work at home, with also possible electronic contact with the " public 'and with precise and scheduled working hours. On the other hand, general smartworking proceeds through tasks that are provided from time to time within the work dynamics. These tasks do not have particular schedules to follow but have deadlines as a prerequisite, which leads to a flexible time and flexible schedule. It is a real working revolution if applied quantitatively to a growing phase of worker, which however, as often happens with the new forms of deregulation of the world of work, risks being inserted into distortions and cumbersome applications. It is no coincidence that even the unionization of new forms of self-employment applied indiscriminately as an employee has caused significant problems, also from a generational point of view, in the absence of regulatory instruments.

In relation to smartworking there is not only a recent but not very specific legislation, but there is also an objective difference in the relationship between colleagues (and therefore also trade unions), in case of team problems. The missed report, moreover, also affects the career opportunities of which we recall the important and fundamental contribution of the sociologist Sassen in this regard, who, decades ago, had already defined the aggregative need of people as one of the pillars of the lack of urban fragmentation of the relations of production and management of own capital.

A dangerous basic conflict is therefore structured between the quality of domestic / extra-work and working life, which merges in the same place that becomes a space for living and working, thus laying the foundations for achievements that are also important from a salary and equality point of view (including gender, if we consider the inequalities of treatment deriving from maternity in terms of employment), but which manifests a series of contingent limits that, if badly managed, can lead to deterioration, to a domestic prison without the possibility of escape, excluding some small

28

possible outings in the case of " mixed " smartworking that delegates a working component in presence for a few days a week. From the socio-economic point of view, urban and territorial differences emerge that make internet infrastructures suitable for these new typologies. Necessarily a broadband fiber or network infrastructure for the internet is essential. If it is true that some nations have already provided this infrastructure over the years (this is the case of Italy with the broadband and ultra-broadband plan), many have not done so, creating enormous social disparities both in the acute phase of the lockdown and in the subsequent phases: a valid concept, in some situations, also for the right to education.

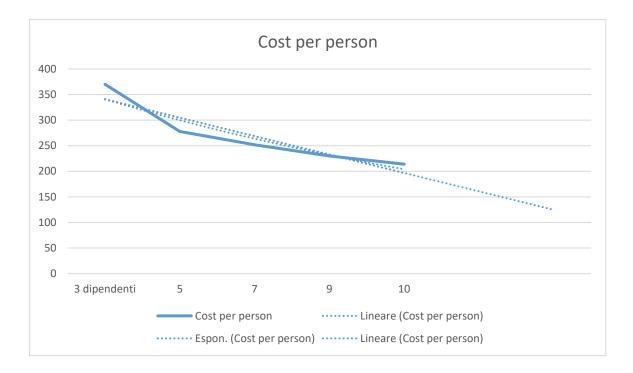
These disparities are gradually increasing as paradoxically the number of people excluded from the network decreases, always based on the deterministic necessity of the technique, a small offline group will be more disadvantaged, as the majority will necessarily move online. Then there is an economic component, probably the reflection on the most important urban service sector, which is determined by the economic convenience of corporations and private companies. Although the aggregative component is fundamental in the world of work, it is equally true that there is an objective maintenance cost for offices and company workstations.

If we estimate that in Milan the average fixed costs for an office of 10 people are divided as follows:

Fixed costs	€ (2019)
Average rental cost (10 people)	900€
Condominium fees	150€
Utilities	400€
Cleaning	300€
Consumables	400€

We will have a monthly total of about € 2100 per month for every 10 people, which in trend roughly considered using the average prices, per person, follows a function of this type:<sup>50</sup>

<sup>&</sup>lt;sup>50</sup> Data obtained through rental cost estimates;



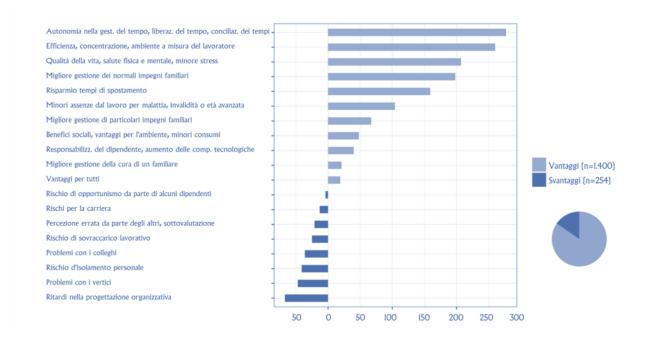
This is a considerable saving that is in fact downloaded to workers by companies on a monthly basis, in particular in reference to consumables. The benefit that could be defined as compensatory by the worker himself in the elimination of transport costs but at a qualitative level the effective creation of a suitable workplace in houses that does not allow good adaptability and mobility, could become a serious problem, as the company definitively and generally discharges the costs deriving from internal company welfare in the workplace since, as dematerialized, they are no longer functional for certain purposes. Analyzing the hypothetical costs of traveling by train monthly, always taking into consideration the case of Milan we have:<sup>51</sup>



<sup>51</sup> [Fig. 1] Lombardy monthly pass cost, Km index scale;

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From these quick calculations, the economic savings deriving from smartworking people who, from all over Lombardy, no longer have to go to Milan are evident. Assuming a standard cost of smartworking, it is possible to note how the saving differential is low or if not negative in the urban areas closest to the workplace. Considering the significant impact of travel for work reasons on urban organization, determined by rigid arches, it is reasonable to expect that urban arrangements will be particularly sensitive to stimuli that go in the direction of desynchronizing schedules and reducing the need for travel. The results of the survey indicate that the conditions are present to configure integrated policies with a wide range of action, which go beyond the objectives and boundaries of the individual administrations and turn, with the possibility of success, to the territorial context to guide and manage paradigm changes of urban mobility. Does this mean that there will be a return to a country house? Probably not. Beyond the romantic definition of this idea, the groups concerned, which are so substantial, are however a small slice of the overall urban population. Based on the flexibility and satisfaction of smartworking workers during the lockdown, it is possible to note, in fact, that a good part of the feedbacks are positive, but that some situations already mentioned previously they are negative.<sup>52</sup>



<sup>&</sup>lt;sup>52</sup> ENEA Report, *The time of Smart Working. The PA between conciliation, enhancement of work and the environment First results of the national survey on agile work and teleworking in the public sector*, Marina Penna, Bruna Felici, Roberta Roberto, Marco Rao, Alessandro Zini, 2020 ;

The concern for diversity, even mobile, leaves open a reflection on territorial developments. There are in fact specific characteristics relating to the functionality of infrastructural systems. Regional systems provided with connecting arteries and services could be better facilitated in an overall dynamic, mainly if they are peripheral to metropolitan centers. This is the case of Lombardy which can foresee an increasing outward mobility relying on a dense network of infrastructures that make it economically possible, and therefore sustainable, to maintain a high rate of smartworking on sector workers. It is therefore appropriate now to analyze the maximum possible number of people in this new mode of work.

#### The numbers of smartworking

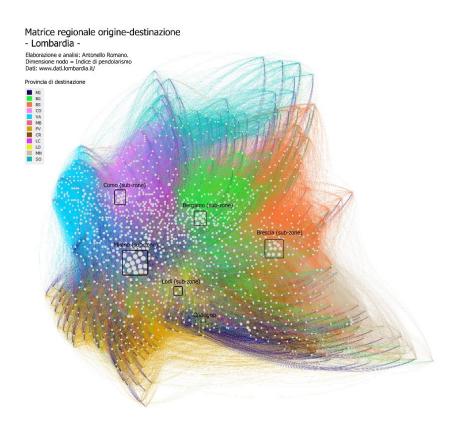
It is useful to remember that now only the numbers of Italy will be analyzed. Although these forecasts are not interchangeable with a part of the other Western countries (often with higher smartworking rates than the Italian average, think of the Netherlands), it is useful to remember that the purpose of the research is to find the elements of urban orientation at the in order to understand and analyze a possible development, including management, of the urban economy. The aim is therefore to identify the directions and influences that these situations will have on the urban.

In Italy in 2019 the number of people in smartworking amounted to about 570,000 units who worked from home, on average, 1.4 days a week. The point is therefore not only related to how many projects are in place but to how many can extend to a greater number of days of the week.<sup>53</sup> Si trattava comunque di un fattore in crescita costante rispetto agli anni pregressi che, in particolare sull'annualità del 2019 riscontrava un incremento di circa il 20%. Questa forza trainante è esplosa, per necessità normative con l'epidemia di Covid-19 However, this was a factor in constant growth compared to previous years which, in particular on the year of 2019, saw an increase of about 20%. This driving force exploded, for regulatory necessity with the Covid-19 epidemic. With this it will be seen not that the smartworking workers during the lockdown will necessarily be the jobs that will assume the remote mode, but the maximum current potential expansion of this type, bearing in mind that future jobs that do not yet exist and that will develop by 2050 will be characterized by a maximum level of digitization.<sup>54</sup>

 <sup>&</sup>lt;sup>53</sup> Smart Working observatory, School of Management, Politecnico of Milan, Bologna, 30th October 2020;
<sup>54</sup> UN datas;

During the lockdown, estimates speak of a total of about 6,580,000 employees in smartworking, more or less 30% of all. It means that about 10% of the entire Italian population could potentially cancel their trips to get to a redefinition of their workplaces.<sup>55</sup> If these data are cross-referenced with the percentage of employees in the sectors involved in smartworking, it is possible to establish important numbers of travel possibilities.

In case of analysis, let's take the Lombardy Region with reference to the city of Milan. Lombardy Region has a number of inhabitants equal to 10 million<sup>56</sup>, and contributes to about one fifth of all Italian GDP. The urban region of Milan contributes 10% of the national GDP and is home to over 45% of all businesses in Lombardy<sup>57</sup>. Nonetheless, the diversification between primary, secondary and tertiary sectors increases only by 2% in the metropolitan area compared to the rest of the employment in the region, proving that the concentration of service work realities in Milan attracts a high number of commuters beyond outside the urban borders, from all over Lombardy and beyond. If we assume that about 1/3 of all Lombard employees started working remotely, it could be assumed that about 1.3 million people in all of Lombardy could work remotely, of which about 200 thousand would be from the city of Milan.



<sup>&</sup>lt;sup>55</sup> ISTAT, 2019;

<sup>&</sup>lt;sup>56</sup> ISTAT, population at 30th Jube 2020 ;

<sup>&</sup>lt;sup>57</sup> Datas, Città Metropolitana di Milano, 2018;

Considering that around 1 million and 800 thousand commuters arrive in Milan every day<sup>58</sup>, the number of employees per sector, provided by the Istat database<sup>59</sup>, and the type of tasks affected by the closure obligation, it has been estimated <sup>60</sup> that about 63% of workers remained at home and were able to continue working thanks to the use of remote work. These data suggest that the decrease in travel associated with smartworking has affected approximately 23% of missed trips. Contextualizing this figure by reducing those who remained at home without being able to work, a potential reduction in total daily movements is obtained, thanks to the massive use of agile work, equal to 14.5% with peaks of 19% if different time bands are analyzed. This is a number of people that impact, as we have seen, on the economic strength of the economy that is structured around the big players and companies in Milan (commerce, bars, restaurants, cultural sector).<sup>61</sup>

Similarly, if we take back the possibility of the Milanese smartworkers of being able to arrive at a qualitative improvement of their own housing existence, since the added value of proximity could lead to preferring less central homes, in the recently built hinterlands and, sometimes going to lean on homes inhabited by low-income people, this could also lead to gentrification phenomena and possible displacements of the population to the margins, considering that the incidence of smartworking sometimes goes to the disadvantage of the most fragile categories which, consequently to an increase in the cost of living and transport, could spill over into central but peripheral locations, further deteriorating their conditions. These are borderline scenarios but if not analyzed they can lead in the long run to a further fragmentation of urban dynamics between neighborhoods.<sup>62</sup>

## Consequences of smartworking

In addition to remembering how the powerful impact of smartworking modifies urban realizations for the purposes of urban real estate, which will be further explored, it is appropriate to indicate for the purposes of the evolution of interests also of ecological resilience of urban systems, how the decrease in travel environmental impact. Always taking up the previous study on travel in the Milan

<sup>&</sup>lt;sup>58</sup> ANCI, Gli stili di mobilità degli italiani, il percorso (lento) verso la sostenibilità, 2016;

<sup>&</sup>lt;sup>59</sup> Istat, Censimento industria e servizi, 2011;

<sup>&</sup>lt;sup>60</sup> RSE, Smartworking e mobilità: l'esperienza del lockdown a Milano, 2020;

<sup>&</sup>lt;sup>61</sup> Eupolis Lombardia, *Mobilità pendolare in Lombardia*, Milan, 5th October 2016;

<sup>&</sup>lt;sup>62</sup> For more data on mobility at the time of Covid, please refer to the Google data processing and mobility link *www.gstatic.com/covid19/mobility/2020* 

area, the data obtained together with the data provided by Tandem and the Metropolitan City of Milan were applied.

"The result for trips avoided thanks to the use of agile work provides for a - " reduction of about 5,800,000 car-km per day, for private car transport alone, that is about 60% of the total. Translated into environmental and economic benefits, it means saving 112 ktoe / year, equal to about 15% of total consumption in the Milan area, and missing emissions for 500 tons per day of PM and 1,300 tons of CO2 - ".

We understood that the number of potential people in the Milanese area cannot be ignored, we are talking about very high numbers that in any case change the habits and liveability of an entire city. Going through a more comprehensive reasoning, it is good to remember how the Milanese case is also taken as a symbol in relation to its Italian function as a global financial hub, as well as for its morphological peculiarities. If we take for granted the fact that global capital will continue to act as previously stated with global hubs and locations, the spatial differentiation of work could settle at a regional level, decreasing the urban power of central locations only in the event that certain particular conditions exist. which will be subsequently analyzed: urban relationship with the hinterlands, high commuting, high and integrated infrastructures, union training and working system.

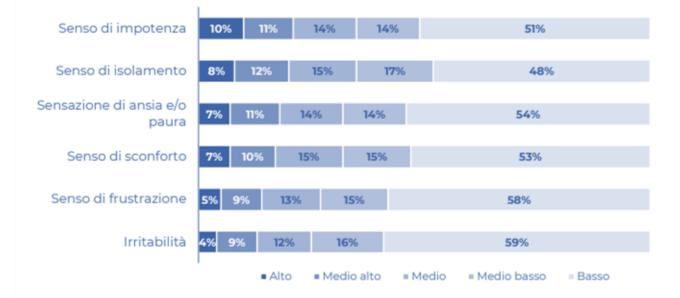
In addition to the environmental consequences, it is good to analyze the personal impact of workers for a lunge from a social and psychological point of view since the behavioral implications and needs of a large slice of the population must be taken into consideration for the global analysis also on actual developments. In the studies carried out by the national observers <sup>63</sup> <sup>64</sup>, it is possible to find that in a phase of total closure, the summer reopenings have led to a gradual return to work in the presence, always arriving above the levels of 2019 but far below the levels of the lockdown. In particular, in the months of May and June, large companies and the PA found a presence of 10% of workers in smartworking compared to 70% in May and June, and then returned to higher levels (15%) in September and October.

The choices of this return were dictated, in part, by the desire to socialize of employees, to increase the moments of confrontation and also the sense of belonging. There was therefore a managerial willpower as the need for teamwork and socialization, even for new hires, was fundamental. In this

<sup>&</sup>lt;sup>63</sup> Osservatorio Smart Working della School of Management del Politecnico di Milano, Bologna, 30 Ottobre 2020;

<sup>&</sup>lt;sup>64</sup> Oss. Smartworking, Lo smartworking durante l'emergenza Covid-19, e il punto di vista dei lavoratori, report 2020;

regard, it should be remembered that the category of people who felt more isolated in smartworking, from studies, were precisely the millennials: the native thimbles. The problems encountered by many of them are in fact related to situations of isolation and stress, often not attributable exclusively to the Covid epidemic as they are also found in other surveys on the satisfaction of workers. Having said this, an important component also emerges with regard to the company's long-term will to implement smartworking. In fact, not only for a reshaping of costs (despite the short term some companies will expand their activities to ensure social distancing, 12%), but also to encourage innovative working methods since the lack of presence modifies interpersonal and hierarchical relationships, they are placing some types of work not based on tasks, very different from the past. Consequently, it is very likely that an important slice of companies will try not to lead to total smartworking, in post-emergency moments, but rather that there is a sharing of work in presence and remotely, so that a good part of the activity can also be referred not only to the personal component but to team work which, in fact, especially in some business and organizational types, must be included.



Autonomia	43%	46%	10% 1%
Percezione di fiducia da parte del tuo responsabile	42%	42%	12% 3% 1%
Responsabilizzazione su obiettivi e risultati	40%	47%	11% 2%
Efficacia nella comunicazione con i colleghi	37%	47%	13% 2%1%
Efficacia del coordinamento con il capo	36%	43%	15% 4% 2%
Conciliazione vita privata e lavorativa	35%	41%	18% 4% 2%
Efficacia nel lavoro	33%	52%	13% 2%
Efficienza nel lavoro	31%	45%	19% 4% 1%
Capacità di risposta a richieste urgenti	30%	48%	18% 4%
Accesso da remoto a documenti e applicativi	30%	43%	20% 5% 2%
Condivisione delle informazioni	28%	48%	19% 4% 1%
Efficacia nella comunicazione con i soggetti esterni	25%	45%	22% 6% 2%
Efficacia delle riunioni da remoto	25%	42%	23% 7% 3%
Supporto all'innovazione	22%	41%	26% 10% 1%

Ottima Buona Sufficiente Scarsa Pessima



• Lavoratori di organizzazioni pubbliche • Lavoratori di organizzazioni private

37

## 2.2 Consequences on the real estate market

Having analyzed the work and macroeconomic developments relating to the current situation, it is appropriate to question the development of the real estate market in the short term, analyzing some types of data within an empirical analysis, comparing data on the Milan area. It should be pointed out that the main type of analysis will concern the housing real estate market as the ultimate recipient, which is affected above all by the structural economic declines also in the commercial and services component. Starting first from a historical comparative analysis, let us examine the situation of the financial crisis of 2008.

While considering itself completely different from the current one, it is used to compare different analyses from an analytical point of view on different economic developments. Analyzing the development directions of the global recession a decade ago, real house prices fell by an average of 10%, wiping trillions of dollars from the world's largest asset class. While the housing market wasn't the trigger for the economic woes this time around, investors and owners still prepared for the worst as it became clear that covid-19 was going to push the world economy into its deepest recession since the depression of the century.

## Historical analysis

During a crisis it is easier to detect the differences compared to the previous ones rather than the similarities, especially since the analyses of the previous crises show how the simple quantitative forecast of the shock impact scenarios, then, did not materialize, because they did not take into account a number of factors. Just think, for example, of how some forecasts on recent crises were later denied by the facts, such as the prediction about the end of large skyscrapers following the terrorist attacks on September 11, 2001. The only crisis born in the "real" which caused a total but gradual rethinking of economic paradigms is certainly the oil crisis of 1973, because the effects it produced make it similar to the current one<sup>65</sup>.

During that crisis, the Italian real estate market suffered the crisis in two stages, first as a collapse in sales and then as a collapse in house prices. As with other crises, the market recovered, subsequently "with interests " and, in Italy, also following strong inflationary policies.

<sup>&</sup>lt;sup>65</sup> Mario Breglia, Stefano Stanghellini, *Scenari Immobiliari, valutare nell'incertezza, un modello previsivo 2020-2035,* Milan, April 2020;

## Short term

But analyzing the data, surprisingly compared to the worrying spring analysis, pessimism now seems out of place. Private house prices increased in most middle- and high-income countries in the second quarter of 2020<sup>66</sup>. In the Western world they have risen at an annual rate of 5% plus the fact that most financial investors in the real estate market have recovered much of their assets since the stock economy collapsed in October 2020. Furthermore, not only has steady growth been found in most American, Asian and European cities, but in some areas of the world there has been a real boom. The Economist points out, for example, how the price of houses in Germany was already 11% higher than the previous year. The explanation given to describe this huge reversal of prospects is given by a change in the macroeconomic policy of the states: fiscal policy, monetary policy and buyer preferences. Fiscal policy, for example, is central to understanding the trend in house prices in the short term, to explain the inexplicable growth. In a normal recession, the loss of jobs leads to a reshaping of income. Foreclosures decrease demand and increase supply by dropping house prices leading to a whirlwind of credit problems that led to the implosion of the system in the last financial crisis.<sup>67</sup>

Unlike the last financial crisis, however, governments, understanding that they do not have to run for cover to safeguard financial giants and, consequently, support the real economy, but with a very high political cost, they preserved household incomes<sup>68</sup>. Donations through wage subsidies such as the redundancy fund in derogation in Italy, which helped support millions of families for months, together with permits and welfare benefits, amount to percentages that in rich countries reach an average of 5% of Gross Domestic Product, bringing to an income growth of 100 billion in the families of the G7, despite the economy having marked incredible declines in productivity<sup>69</sup>. This leads to the consideration that at the moment a large part of the G7 and G20 economy is supported by state public policies <sup>70</sup>.

Furthermore, there is the situation in which central banks around the world, to support growth, have cut interest rates by several percentage points or have remained on the same monetary policy already in force with very low interest rates. It is worth remembering how much European monetary

<sup>&</sup>lt;sup>66</sup> The Economist, *The three pillars: Why, despite the coronavirus pandemic, house prices continue to rise. Monetary policy, fiscal measures and buyers' preferences explain the unlikely boom,* 30th September 2020;

<sup>&</sup>lt;sup>67</sup> Luciano Gallino, *Finanzcapitalismo, la società del denaro in crisi*, Turin, 2012;

<sup>&</sup>lt;sup>68</sup> Federico Rampini, La trappola dell'austerity: Perché l'ideologia del rigore blocca la ripresa, Milan, 2014;

<sup>&</sup>lt;sup>69</sup> World Bank datas;

<sup>&</sup>lt;sup>70</sup> OCSE data;

policy has invested in maintaining very low interest rates.<sup>71</sup> The FED instead allows, in 2020, to take out a 30-year fixed-rate mortgage at an annual interest rate of 2.9%, down from 3.7% at the beginning of the year.<sup>72</sup> Consequently, this makes possible a greater propensity to buy, increasing demand and making sure that real estate policy can undergo an overall growth at a macro level. In addition, asset returns on other assets declined. The use of the financial capital of the urban city is therefore once again emphasized, often regardless of a mandatory perspective arrangement of individual households. The incidence of speculative foreign capital in one's system, for example, leads to the explosion of a bubble in the market when the situation is unsustainable. The crisis of the European economies of the Mediterranean of a decade ago, in fact, is attributable to a dependence on the real estate financial market by these economies. This does not involve a oneway boom because even financial investors themselves seem concerned about the long-term developments of Covid.

Moreover, the same states are adopting policies aimed at sustaining the market itself. Many European countries such as Italy, Spain etc. allowed borrowers to suspend their mortgage for months; the Netherlands, the United Kingdom etc. have activated projects to block or disincentive foreclosures. Then this is the most important factor when compared to the long term: the change in consumer preferences. Families typically use nearly 20% of their income on housing<sup>73</sup>.



The Economist

Politecnico di Milano, Master Degree Course in Management of built environment - Degree Thesis by Gabriele Giudici

<sup>&</sup>lt;sup>71</sup> Georgi Krustev, Working Paper Series, The natural rate of interest and the financial cycle July 2018;

<sup>72</sup> FED data;

<sup>73</sup> Dati OCSE riferiti a G7, 2019;

The effects of smartworking and new work systems have reoriented consumer needs towards larger homes and suited to new types of living, which pumps up the price of homes but, what is highlighted is that people often tend to prefer larger apartments close to where they already are, probably, especially in this first phase, because the conditions of uncertainty tend to favor non-extradition from one's own social context of reference which, in case of need, could be useful. It seems more likely that people are looking for larger homes near where they already live.

#### Long term

The question therefore arises: if and for how long the values of the houses, especially in the city, will be able to continue their upward march? As the crisis continues, governments are increasingly struggling to support current spending and debt sustainability, which could lead to long-term austerity measures, even if, given the widespread enormity of unfavorable situations, it is not unthinkable a redefinition of the rules for a new definition of debt, at least through organizations superior to the States<sup>74</sup>. It is necessary to keep an eye on the horizon if you really want to understand what orientation capitals and cities want to undertake in the long term, this is because the flows of capital, goods and people are reoriented, changing methods, shapes, addresses. But they don't subside. Similarly, some cities or their remodeling in the integrated system of the regional hub, will remodel themselves while others will increase their competitive strength, in an increasingly interconnected market because a capital flow that will increasingly disintegrate physicality but without radically changing the strength of support of the metropolis. The post-pandemic could increase global competition due to rising liquidity, making it even faster and more ferocious.

Taking into consideration the study carried out by *Scenari Immobiliari*<sup>75</sup> it is possible to see a forecast dictated by a phase of stagnation and followed by a subsequent growth phase. This model, kindly granted to the undersigned for the preparation of this paper, is based on the analysis of the current crisis by adding together the previous historical developments that have highlighted that, both in the real economy and in financial transmitted into reality, a phase of decline and stasis was followed by a subsequent acceleration that brought the market back to its historical precedent within a few years.

<sup>&</sup>lt;sup>74</sup> Statement by David Sassoli, President of the European Parliament, November 14, 2020, on the remodeling of the Covid debt;

<sup>&</sup>lt;sup>75</sup> Mario Breglia, Stefano Stanghellini, *Scenari Immobiliari, valutare nell'incertezza, un modello previsivo 2020-2035,* Milan, April 2020;

The study focuses attention on the typological areas of the residential and office market in Milan, the Metropolitan City of Milan, Italy and Rome, focusing on rents, prices and yelds. We will mainly examine the Milanese context by relating it to the national situation. As previously mentioned, the market study leads everything back to a "U" which portends new future market responses. To differentiate the results emerge some factors including:

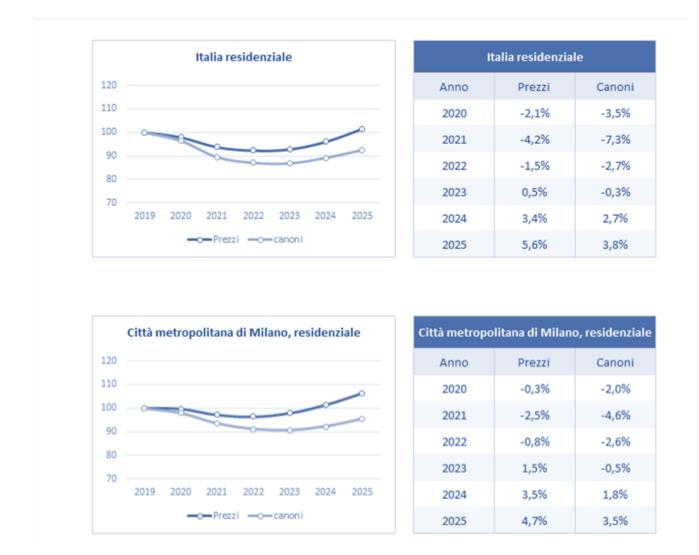
- The drop in the descent more or less marked
- The duration of the stagnation
- The times of ascent

These variation indicators can be assumed on the basis of a different urban typology which makes the response times to growth different also according to the composition of household income, the composition of the company and the ability to react of the companies. <sup>76</sup>



# SCENARI IMMOBILIARI

<sup>&</sup>lt;sup>76</sup> [Fig.1] Scenari Immobiliari, residential, Milan;



<sup>77</sup>This report on rents also reveals a non-homogeneity between all places, as leasing is an increasingly reactive market. However, assuming the rental fees of the studio, we observe how, net of prices, there is a more marked decrease between the city of Milan and the metropolitan city [Fig. 1 vs Fig. 2]. This dyscrasia can be imagined as structural and deriving mainly from the failure to reach saturation, often also resulting from the rents of university students and workers who, in fact, in 2020 left the city in great numbers. In fact, from the resulting forecasts, it can be observed that there is a huge difference in rental recovery between the city and the hinterland in the wake of the previous directives and by analyzing the responses to past crises, which have always given considerable impetus to the urban component of the central locations. In addition, it should be emphasized that the pandemic situation may have discouraged public policies to " calm " mortgages and rents, an issue that was increasingly affecting the public debate in the city of Milan.<sup>78</sup>

<sup>&</sup>lt;sup>77</sup> [Fig.2] Scenari Immobiliari, Milan (metropolitan) and Italym residential;

<sup>&</sup>lt;sup>78</sup> Agreed rent of the Municipality of Milan;

It therefore becomes difficult to `` strip " the current market of many contributing causes that are not foreseen in the next period even if it is possible to draw a fairly clear distinction by saying that in all probability the real estate market will actually follow movements described by the aforementioned study, even if in the wake of these forecasts it is useful to imagine the possibility of a redistribution of increasing value of prices on territories of the regional ambit.

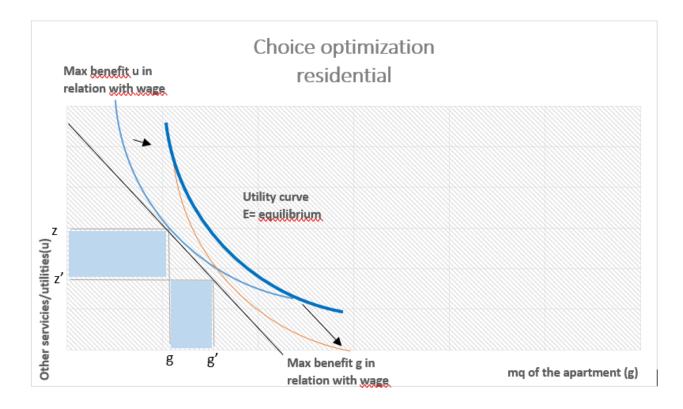
It therefore becomes probable to imagine that access to credit and forms of income support have not only acted as an effective buffer but that they will probably be able to reduce the effects of the crisis in the medium term, ensuring that current forecasts are an effective guideline but which will likely be remodeled over the long term by re-distributing growth. The trend reversals, therefore, will not occur a priori, but will always follow the logic of growth of the annuity and financial capital of the last 40 years, with particular reference, however, to a different allocation of growth and decrease which, in logic of projection, can result in significant changes.

## Change of optimization choice

Starting from the evaluation of the choice of real estate lease, it is good to focus on the issue of private homes because differently from how we used to observe the office / workplace component, it is assumed in a substantial way within the structures of the home itself. This is partly at the basis of the potential decrease in the supply of offices since these costs, as mentioned, are passed on to the workers who, however, no longer need to make the journey. This change the setting of the choice of location for a home which, for some types, is also taken as an internal workplace. This epochal change leads to an orientation of the lower rental cost on two factors:

- A substantial stagnation or decrease in the importance of the services required nearby (in Figure Δz);
- A consumer orientation for larger homes (in Figure  $\Delta g$ );

In the first case this shift is dictated by the almost unlimited development of logistics and ecommerce, which drastically reduces the services accessible only through localization. It is sufficient, in fact, to be in 99.9% of the areas served by the logistics deriving from online trade for having no more need of the convenience store near the house or the specialized shop a few kilometers away. The second peculiarity derives from the actual propensity for an increase in demand for square meters which would result from a more efficient rationalization of the new home needs.

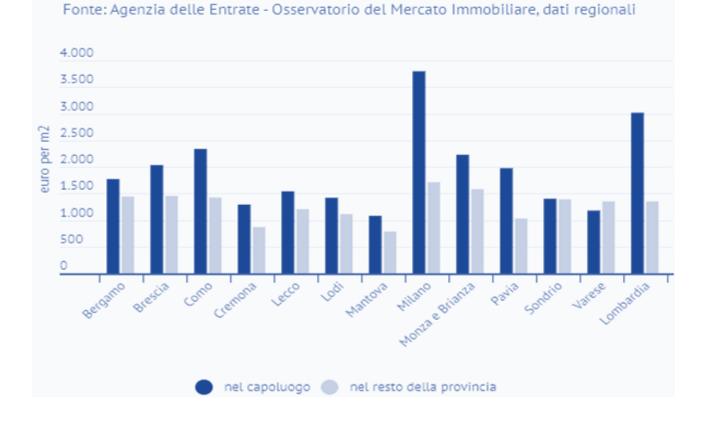


This yield maximization could have additional components as it is included in a real estate market redefinition project. Therefore, if we assume the capacity to increase the available square meters of a house, simply in the average increase of about 10 square meters that we could hypothesize for a study or small office equipped with all the minimum necessary, then a potential calculation based on the ceiling of people who could potentially be smart working and who do not have adequate space for this purpose.

If we assume the previously calculated data relating to a potential capacity for minor workers in the Milanese area equal to 1 million and 300 thousand units, taking into consideration the data of the houses, we know that the Italian average of living area is 67 square meters per citizen, while in Lombardy it settles at 61 square meters<sup>79</sup>. There is a gradient linked to the size of the inhabited center: the smaller the city, the larger the average size of the houses. There is therefore a general discrepancy between Italy and Lombardy which is quite significant, due to the historical situation of housing quotas. Always taking into consideration the Report of the Revenue Agency of 2019 we observe that in the fourth and last quarter of 2019 in Milan more than one new purchase in five (21% of NTNs) concerned houses of less than 50 square meters and 42% homes from 50 to 85sqm. Among the eight major cities, Milan is undoubtedly the one with the least purchases, as a percentage of the total, of large-sized apartments. In essence, the attractiveness of the Milan area,

<sup>&</sup>lt;sup>79</sup> Rapporto AGID, *Gli immobili in Italia nel 2019*, Roma, 2019;

which has exploded in recent years, has meant that the main allocations, at the real estate market level, were placed on the lower class of housing at higher levels, leading a market segment to underestimate the potential of square meters compared to the individual aspirations that they would have had outside the Lombard metropolis. The difference in prices compared to the rest of the province, in the Lombard provinces, is considerable: it ranges from 3000 euros per square meter in the Lombard capitals, on average, to 1300 euros in the rest of the provinces. If in the municipality of Milan the average price is 3796 euros per square meter to 1713 euros in the rest of the province.<sup>80</sup>



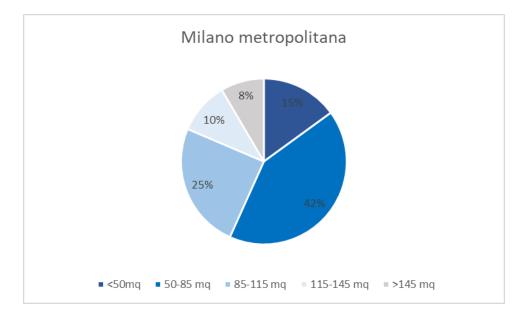
# Lombardia: Quotazione media e variazione annua per capoluogo e resto provincia nel 2018

<sup>&</sup>lt;sup>80</sup> Average price and annual variation by capital and rest of the province, Il Sole 24 Ore, Processing on the basis of data provided by the 2019 Revenue Agency report;

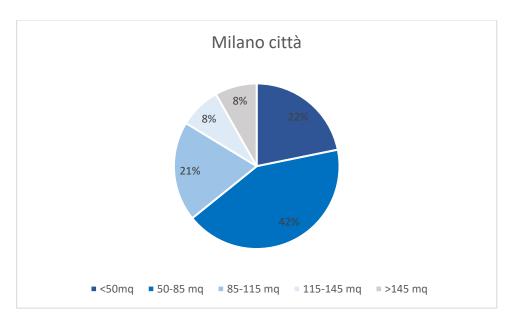
# 2.4 Destruction of value and redistribution

It is therefore likely to imagine that the lack of growth in the real estate sector linked to offices will be "transferred", as a total demand for square meters to the housing market. And it is also possible to imagine how a differentiation of the system can lead to an increase in real estate value in larger and easily accessible homes in an integrated context. Keeping in mind that the potential ceiling on Milan can be hypothesized and that the contests can be expected to increase the demand for real estate, it is possible to estimate the additional surfaces required at approximately 10 million square meters. Although it is difficult to accurately estimate how many of these, full construction and the total amount of unsold available square meters in the Lombardy Region, is mainly located in non-central locations, it can be guessed that the requests for smaller homes in central locations, which are the main source of contracts signed each year, with peaks that Milan has many more accidents than other Italian cities.

Probably, in a first period, the requests for small apartments within the capital city will decrease, causing prices to drop more strongly for these apartments, bringing them to levels (albeit higher), uniform with respect to the regional panorama, while the buying and selling of properties with slightly larger sizes, even if this will be more likely within the contexts of the hinterland or medium-sized cities, due to the different evolution of the choice of positioning.<sup>81</sup>



<sup>&</sup>lt;sup>81</sup> Distribution chart of sales, year 2019, by type of size, Milan province;



In this changed scenario, it will be interesting to see how the allocations will proceed and how the positioning flows will be reoriented. This will not lead to a difference in the growth and attractiveness of global capital, as we have found that these reorient and exploit the infrastructure of cities and, presumably, will play a decisive role in financial gentrification.

If the housing location will follow logics increasingly based on the current location (due to the difficulty of establishing new forms of social relations), on the decrease in the importance of proximity to services and work and increasingly markedly oriented to the physical characteristics of the home; it is easy to imagine that we are only on the threshold of a complex process that changes the substance of living<sup>83</sup>. If the cities in the 70s depopulated due to the gradual decrease of their industrial power, the economic growth that these brought in the following decades was purely based on services, finance, and the location of productive base structures. If these production bases, located in a physical place but operating in the global system, function less and less thanks to the help of the direct human relationship or its presence on site, the production and growth of rental (and therefore also urban) induced, for the city remains, but it is no longer connected to the direct living of people. It is no coincidence that the exponential growth of Milan in recent years has not led to a similar increase in the number of inhabitants in the city itself, which have increased but in a lesser and different way than the trend of urban growth and regeneration. But these financial

<sup>&</sup>lt;sup>82</sup> Distribution chart of sales, year 2019, by type of size, Milan city;

<sup>&</sup>lt;sup>83</sup> Arthur O'Sullivan, Urban Economics, London, 1990;

structures that use the real estate part as profit-generating assets, so much so that they are one of the main drivers of vertical sprawl<sup>84</sup> (as an example, the case of New York), cause an objective difference in growth in the real estate market. It is no coincidence that the forecasts on the growth of values per square meter in Milan are given to increase in the coming years, even perhaps in the face of a smaller number, not of buying and selling negotiations, but of inhabitants of the city itself.

This could lead to very damaging consequences for the real estate market itself, in the long term. A financial growth of large-scale buildings and apartments and a decrease in the sale of small-sized apartments, increasingly regarded as unsuitable, would not even make it possible for the less affluent classes to stabilize in these areas, although there may be a reduction in the power of purchase in the next few years. This situation could be at the basis of a gradual expulsion of the city to suburban apartments of low-income people in need of lower-cost apartments, perhaps abandoned, because now considered too small, by the previous owners, in the hinterlands or in the countryside. There is therefore a risk of real financial gentrification. How much this model will be able to hold depends on how much house prices themselves will be subject to fluctuations and how much access to credit will be available at high levels (interest rates and stable / growing incomes).

It therefore seems unlikely that the transfer of the market value to the surrounding area could be envisaged as, instead, a possible increase in residential areas, not increasing the value of the present but simply putting certain areas out of the market. Above all, there will be a sharing of the hypothetical growth of prices, outside the global centers driven by the search for new homes or expansion of the same, with a decrease in marginalized ones, in the cities a growth of the top bands at the expense of the lowest ones, configuring one scenario of even more marked inequality both within the city itself and, above all, in relations with the suburbs and the countryside.<sup>85</sup>

<sup>&</sup>lt;sup>84</sup> AA.VV, La città per l'uomo ai tempi del Covid, Rome, 2020 [Cap. Salvatore Settis];

<sup>&</sup>lt;sup>85</sup> Agostino Petrillo, La periferia Nuova, Milan, 2019;





<sup>&</sup>lt;sup>86</sup> Photo of the Milan skyline taken from the Venetian walls of the Upper Town, Bergamo, 2nd April 2020;

## **Chapter III - Technical actions and reactions**

Addressing the issue of urban changes, we cannot ignore the analysis of second-instance changes. This is because for every urban development there are others that are opposed to the trend of the contingent, changing possible forecasts whenever public opinion and politics become aware of the need for action. With this we want to affirm that the trend that may appear at a given necessary moment, is modified on the basis of the degree of awareness that this reaches, affecting the pre-established trends. Smartworking, for example, can have a stronger or less strong impact on the basis of political choices that lead to greater or lesser regulation, always based on what is technically possible, but making the contractual part different depending on the situation. This is a picture that cannot be underestimated especially in countries like Italy where the public presence, as well as most of the European states, together with the unionization of the world of work, is decisive in the strategic direction of industrial and labor policies.

With this we want to analyze, in a theoretical way, in this chapter, the possible reactions of the urban context to the changed conditions. The dematerialization of social processes and the shrinking of physical contact and urban contamination will inevitably lead to the creation of new spaces and projects, some of which will be able to give space to new aggregative forms of a contemporary mold, based on growing techniques, while others will develop in continuity of a process of reaction, of re-materialization, which do not necessarily pose themselves as negative for the urban context. For example, this is the entire economic component based on massive aggregation such as the world of art and entertainment, which, like tourism, has enormous impacts on urban dynamics. It is therefore appropriate to dissect some basic considerations on the basis of the changed context that is synergistically associated here with the theme of transport.

In fact, transport plays a crucial role in cities, not only for commuting phenomena but also for tourism. The current world of transport, both public and private, whether by road, rail, sea or air, comes to life from the previous global economic context, characterized by an ever-greater acceleration of the quantitative numbers of mobility. A system of this type has favored the reduction of transport costs dramatically over the past 20 years.<sup>87</sup> In particular, the low-cost airline system has flooded the international market with the effective possibility of traveling enormous distances in a relatively short time and with relatively affordable costs for most of the Western and Asian middle class. The average prices of a plane ticket, for example, have already risen in September 2020 by

<sup>&</sup>lt;sup>87</sup> ISTAT report, *Movimento turistico in Italia*, Rom3, 2018;

49% compared to the same period in 2019. These are mainly problems related to the need to respect the government rules on social distancing, but also to the 'increase in airport expenses. This is a Copernican revolution that is already leaving a series of failures and defeats in the field, despite the public intervention of various governments. The point is that a substantial part of the sector could disappear and, in the decrease of a potential demand, it would be a strong change in the possibility of travelers to take advantage of low-cost services until now taken for granted. It will therefore be consumer orientation, as well as public will, that will define the future of this sector, which in turn could contain or change the vision of European cities of art affected by overturism.<sup>88</sup>

Regardless for destination intentions now, when and if the Covid threat is mitigated, it will be difficult for planners and policymakers to juggle pressures from the industry lobby to quickly bring tourists back, while avoiding a return to the excessive problems of the past. But probably, here, more than in other cities in the world, the pandemic has led to greater awareness of the " right to the city " and its usability.

89



 <sup>&</sup>lt;sup>88</sup> CNN, These destinations were overwhelmed by tourists. Here's how they're doing now, 27th October 2020;
<sup>89</sup> Lorenzo Quinn, Art installation on the Grand Canal, Venice, 2017. The artistic work aims to highlight the fragility of the city and buildings, especially historic cities, in the face of human hands, mostly responsible for climate change;

## 3.1 Right to the city

Keeping in mind future urban developments, in the short term, it is fundamental not so much to make long-term predictions, starting from those data, as to a necessary and immutable evolution, rather it is appropriate to analyze it because the changes that develop from a break with the past, even very strong, always cause a reaction. The search for a new balance, between the certainties of the past and the uncertainties about the future, lead to a development that is not always harmonious, which proceeds in tears, in an inconstant manner. These tears are caused, in modern times, by the expropriation of the right to the city of the masses. To understand what this right is, it is good to briefly review the thought of Henri Lefebvre<sup>90</sup>. By right to the city, Lefebvre means the possibility of being able to access the resources of the city, the right to participate in the activity, to use beyond the right of ownership. This right is claimed through the appropriation of the times and spaces of urban living. Lefebvre argued that there was a need to reform social and economic structures and the need for a drastic change in the decision-making framework. The city, therefore, is not only the production of space, but is also a concrete opportunity for the regeneration of social space through the active participation of the inhabitants who live and cross the places.

"It is the possibility of re-appropriating space and time based on the needs and requirements of those who live there, especially the weakest. In this perspective, urban society becomes a field of use value in which inhabitants can undertake a path of emancipation and liberation from the yoke of precariousness and poverty. Transforming one's living space, making it useful for everyone's needs is the authentic way to practice that utopian-practical ideal that Lefebvre called the right to the city."<sup>91</sup>

In summary, Lefebvre brings the city back to its primordial function of centralization and aggregative sociality, placing the hierarchical urban structuring as para necessary but facing distortions with respect to the present situation.<sup>92</sup> Urbanization has played a crucial role over the years in absorbing surplus capital, acting on an ever wider geographical scale, with far-reaching consequences. Just think of the processes of creative destruction that have expropriated any right to the city from the urban masses. This mechanism periodically leads to revolts, such as that of the dispossessed in Paris

<sup>&</sup>lt;sup>90</sup> Henri Lefebvre, *Droit à la ville*, Paris, 1968;

<sup>&</sup>lt;sup>91</sup> Francesco Biagi, *Sul concetto di "Diritto alla città" in Henri Lefebvre, "*AltroNovecento", scientific paper of Micheletti Foundation, Brescia, 2018;

<sup>&</sup>lt;sup>92</sup> Max Weber, Wirtschaft und Gesellschaft (Economy and society), Munich of Baviera, 1922;

in 1871 or the urban social movements of 1968 from Paris to Bangkok, Mexico City, Occupy Wall Street.<sup>93</sup>

The right to the city and its support emerges within urban contexts that place the economic and factual reality as an obstacle to the full realization of man. The contingency of public spaces, the privatization of services, the increase in the architecture of segregation, contribute to fueling a feeling of generalized exclusion that leads to rebellious representations such as those listed above, but which can also be observed in a smaller scale inside of urban contexts.

Milan is again a case of analysis in which we can take the activities that have occurred in this decade, which has characterized the city for a significant cultural and economic growth. But this always starts from an act of reaction which, as regards some cultural and social spaces, can also be traced back to the experience of the BASE space, which arises precisely from a phenomenon of cultural-social innovation, i.e. as an institutional response to occupation of the Galfa Tower by Macao in 2012. Fortunately, this situation does not remain a dead letter for the city administration, leading to a process of transformation of the former Ansaldo spaces (Zona Tortona) to give a place to all the different sectors of culture Milanese, and inserting places for workshops and co-working: producing hybrid spaces, doing business, bringing growth. However, one wonders what these processes led to and from what they were generated. The growth of cultural and cognitive capital is in fact indicated as one of the major foundations of the urban and social growth of contemporary cities.<sup>94</sup>



<sup>93</sup> David Harvey, *Rebel cities*, New York, 2012;

<sup>&</sup>lt;sup>94</sup> Art gallery, BASE space, Milan, 2018;

If it is true that cultural innovation finds the causes of its growth in capital and cities, it is equally true that it leads to economic implications that cannot be related to the mere production of goods, this is because the desire to create art and culture always manifests itself within a movement of rupture with the present order of politics and society. The manifestation of the will of a new society has always contradicted the pre-established order, sometimes influencing it, sometimes changing it.

However, there is a new factor within today's global cities that takes root from the more massive use of the economic system of the cultural capital component. If on the one hand it is true that the intellectual figures of a given time have always been at the service, consciously or not, of urban social economic growth, at one time they also posed themselves as a phenomenon of rupture, while now they become organic to the system itself, in the current phase of cultural and cognitive capitalism. In this process, considering that cultural innovation itself is an integral part of the economic and urban system, it leads to a greater and more transversal awareness of social conditions, arriving at a response that also develops across the board in the field of policy development. In other words, culture, understood as the social and economic revolution of our time, is not limited, within this economic phase, to the creation of value alone.<sup>95</sup> Instead, it arises as a critical production of the very system in which it is inserted, producing political elaboration, which must necessarily be collected by the city institutions, to avoid such cultural projects from falling back into the vortex of capital and cognitive precariat, trying to resist while remaining within the system.

Consequently, the reactions to urban vitality will be in opposition, because of the worsening of a conflict between spaces, in which relationships will be increasingly defined within the domestic walls and in which public space risks further losing value. However, it must be said that most of today's urban interventions respond to a situation of urban and economic relationship rather than to a logic of social contamination and therefore, these spaces, partially emptied, could be rethought with a more local and livability. Sociability and the inability to withdraw from physical contact, combined with the need to return to social approach, will allow a differentiation of approaches between the productive dynamics and those outside the workplace.

We are moving towards a fluid dimension of living, in which urban management will be more fragile as it is less supported by the imprint of capital on physical spaces, but in which a different livability will be configured with, hopefully, new formulas of cultural life, since even the classic places of

<sup>&</sup>lt;sup>95</sup> Richard Florida *The Rise of the Creative Class*, 2002;

enjoyment of culture will need time to re-emerge from a situation of wide penalization<sup>96</sup>. The lack of prolonged cultural enjoyment withers the will to become an integral part of a social system or group, with an overall deterioration that is very penalizing for the whole of society.

In conclusion, it could be said that the risk of a decrease in physical presence and the consequent marginal expulsion from cities in a fairly transversal way in the world, with a transnational work interdependence, could lead to phenomena of social tension due to the suffocation of *sociocultural* urban realities, which, if well channeled, could see their progressive increase, based on the context that will be able to reinterpret them at best. Once again, therefore, the flows do not disappear but are reoriented, some cities will see their index of cultural aggregative strength decrease while others will see it increase. With this, however, it is good to identify the need to implement, on the public side, a careful analysis of the situations that will gradually arise, especially in relation to the hinterlands.

# 3.2 The European peculiarity

The area of European analysis deserves a separate discussion, characterizing itself as unique in a global context that, albeit with its own peculiarities, had the opportunity to expand with an extraordinary urban and demographic flow, mainly in the 1900s. The cities of most of the contemporary world are Fordist, mechanical megacities. In these cities the dimension of living, with some very rare exceptions, is prefigured by buildings rather than by places. European history foreshadows the possibility of enjoying a space that is the result of centuries of continuous development and that, even in modern times, has been able to observe the development of identity, architectural, construction and social cultures, very different over time.

Just think of the impact of morphology and how this changes city in a very social context.<sup>97</sup> Here, the areas not yet peripheral but outside the historic centers show signs of an architecture that is sometimes eclectic, sometimes modernist, sometimes rationalist. The spatial conception of times of uncontrolled expansion of cities has benefited from all the scientific, constructive and technological progress of an enormous series of situations and histories, which have contributed to

<sup>&</sup>lt;sup>96</sup> Silvia Crivello, *Città e Cultura*, Rome, 2012;

<sup>&</sup>lt;sup>97</sup> Michele Caja, Simona Malcovati, *Tipologia architettonica e morfologia urbana*, Milan, 2010;

forming a more stratified and complex society, even today, as the 'living determines your personality, your way of life and your way of thinking and being.

If we analyze the dimensions between European and third-world cities, it is possible to notice how the explosion of the latter poses two different reasoning methods, of scale, but also of quality, since a phenomenon that increases quantitatively, modifies its own reality qualitative. <sup>98</sup>

POPOLAZIONE URBANA	1960 (in milioni)	1980 (in milioni)	2000 (in milioni)	EVOLUZIONE 1960-1980	EVOLUZIONE 1980-2000
				<b>2</b> -1	
EUROPA	266	364	476	+ 38%	+ 30%
AMERICA LATINA	106	240	466	+ 125%	+ 95%
CINA	122	230	443	+ 87%	+ 92%
INDIA	100	214	517	+ 114%	+ 140%
NORD AMERICA	133	183	239	+ 37%	+ 30%
EX-URSS	104	173	240	+ 65%	+ 38%
GIAPPONE	59	91	114	+ 54%	+ 25%
AFRICA TROPICALE	30	83	234	+ 180%	+ 180%

In 1900 as many as 17 cities on the main world agglomerations belonged to the developed world (the West and Japan) and only 3 were those belonging to the "undeveloped" areas of the world (Istanbul, Calcutta, Beijing). This ratio changed relatively around the middle of the century (in 1950 only 13 of the 20 largest cities are found in the industrialized world), while the weight of the Latin American capitals emerged (Buenos Aires, Mexico City and Rio de Janeiro), together with Calcutta, Shanghai and Bombay in Asia. At the end of the century the relationship between "city of the South" and "city of the North" is completely reversed. Only Tokyo, New York and Los Angeles appear among the 20 agglomerations of Asia and Latin America. If at the beginning of the century 90% of the population of the current developing countries lived in the countryside, in the first decades of 2000 more than 50% will live in cities, so that the new citizens of the Earth will live in the cities of the Third World.

<sup>&</sup>lt;sup>98</sup> Giulio Sapelli, *Città europee e insorgere delle metropoli non europee*, 2014

These are therefore cities of relative youth, both constructive and residential, but often they end up constituting themselves as a real hell, interspersed with financial centers, hubs, slums and pseudo Fordist cities. These problems mean that urban developments in most of these centers in the world can develop with a purely metropolitan or neighborhood dynamic, while European cities, which due to their spatial characteristics have had an explosion of small centers growth, are configured as peculiarities of integrated hubs that can respond synergistically around the global city.

In fact, if in a large and urbanized context, the size of population and space could make an urbanized area re-propose as a single city, it is not equally true that as an identity system, which is the basis for the city configuration, the same thing will happen again. Just think of the fact that the whole Lombard foothill belt (which includes all the Milanese area, as well as the Gallaratese, Brianza, Bergamo and Brescia hinterlands) could very well be configured as a continuous urban system, but whose diversification, often identifying, is also at the basis of the development of the cultural and cognitive capital of one's own place with a " human " dimension. Even though they are included in the same economic and social system, which are slightly different, there is an enormous differentiation due to a dimension of local differentiation. As with a single goal of urban biodiversity, the sector identifies itself in a tight mesh of polycentric relationships with the Milanese urban reality at the top, a global city that places within it the characteristics of cultural and economic downsizing, inserted in a European network of relationships.

The historical dimension of the city is idealized as a combination of identity relationships that do not want to be addicted to the logic of makeshift and destruction. Not surprisingly, even in Italy, local fusion battles have always been difficult. Local hyper-attachment to municipal realities (also of historical memory), has laid the foundations for an immediate questioning on the effects of modernity on realities. This does not mean that in Italy and in Europe the historical centers have not been wreaked havoc and acted with a conscious urban planning in the 60s and 70s, but certainly already at an intellectual and cultural class level they manifested themselves, even mainstream, modern claims on changes taking place. Just think of the whole Italian dynamic of Pasolini's memory, both cinematographic <sup>99</sup> and musical<sup>100</sup>.

The hierarchical scale of European cities is reminiscent of the Christallerian scale of relationship between centers, a dynamic that is repeated at the local level, even if more complex, and that

<sup>&</sup>lt;sup>99</sup> Pier Paolo Pasolini, *La forma della città*, 1974;

<sup>&</sup>lt;sup>100</sup> Adriano Celentano, *Il ragazzo della via Gluck*, 1966;

changes scale when distances lose their necessary function. The global city behaves like a portal in which the lines of passage spread over the territory with variable concentrations depending on the distance from the financial center. These cluster agglomerations allow a horizontal and vertical relationship from a qualitative but not a quantitative point of view. The global city, the portal to the world on a nation or a geographical part, opens up and impacts its surroundings, which it integrates with workforce, displacement, mass, consumption, economy, in a logic of saturation that leads to further necessary growth. The European cities of recent years have juggled on this relational dynamic, they " found their place in the world "<sup>101</sup>, and where this has not happened, the phenomenon of shrinking cities has been further marked.<sup>102</sup>

This context places European cities at a crossroads that will change all cities mainly in Western Europe, due to the legal synergic, but whose implications will be definitely amplified. Interdependence is what makes cities synergistic and capable of adapting to social changes, the profoundly changing structuring of small administrative realities, unlike large Asian or American megalopolises, if on the one hand it raises the question of an overall government of urban, very complex and articulated, on the other hand it allows the full realization of realities that democratically define their own address in the world.

This does not take away from the long-standing and inevitable problems deriving from the global economy that has been discussed, both in work and in logistics, but the ability to readjust and integrate the system makes the European context an interesting medium-term development data, which is impossible to reason as with Asian, American or African contexts.

 <sup>&</sup>lt;sup>101</sup> Aranxta Rodriguez, Erik Swyngedow, Reestructuración urbana, polarización sociopolítica y nuevas políticas urbanas (Urban restructuring, social- political polarization, and new urban policies), Bilbao, 2003;
<sup>102</sup> Herrschel Tasillo, Regions in Transition: Regional research in Central Europe, 2014;

103



<sup>&</sup>lt;sup>103</sup> Night satellite view of Western Europe, the resulting urban lights are a mirror of the complexity and urban relationships created by history;

<sup>&</sup>lt;sup>104</sup> Umberto Boccioni, *La città che sale*, Museum of Modern Art, New York, 1910, 199,3×301 cm;

# **Chapter IV - Possible perspectives**

In this chapter it is proposed to draw perspectives regarding what is expressed within these pages. It is not easy to arrive at a synthesis, given that the prospect is uncertain and focused on the decisions of the next months and the next two years, but it is possible to arrive at guidelines that seem to appear decisively, taking shape in the next horizon. These themes could be exposed with these statements, each of which is partially consequential to the next:

- 1. Change of dematerialized workplaces;
  - a. Increased people in smartworking;
  - b. Decreased need for office space;
- 2. Change in the concept of private dwelling;
  - a. Change in spatial needs;
  - b. Spatial location difference in the regional context;
  - c. Modification of the zonal livability;
- 3. Remodeling of the real estate market;
  - a. Reorientation of consumption and investments;
  - b. Displacement of fascia;
  - c. Gentrification phenomena;
- 4. Urban claims
  - a. Right to the city;
  - b. Creation of new forms of collaboration
  - c. Changes in institutional systems

In summary, a non-total but partial remodeling is very likely, an approach that would have taken place anyway but which, accelerating significantly and instantly breaking down barriers, has placed itself as important and qualifying for an entire urban sector. This substantial change, however, as observed in the transport and housing sectors, has a greater chance of being realized in economically integrated contexts and at the urban level. Hence the digressions on Europe and in particular on the Milanese area, as one of the few exemplary subjects in Italy, which can count on many important factors that define the potential: high concentration of people, large conurbation, accessibility to transport, presence of a global, middle-income hub enabling real estate investments. In all this, an exponential capacity for global competition is envisaged not only for global cities properly understood but for integrated hubs, especially in Europe.

It is a reality that from the decrease in mobility and the possibility of exponentially increasing investments, since they are less and less constrained by fixed work dynamics, can make the most of contexts that have an urban integration such as to massively define a change in broad and defined bottom. Although therefore it is difficult to define a future explanatory role of global cities, it is however possible to define areas of action and remodeling, the city as an economic subject will not enter into crisis since it behaves more and more as a more oriented extractor of value to digital and telematic value. Coming out of a mere logic of accumulation, global cities were already orienting themselves on global specificities of services or goods, creating an interdependent network of services on a planetary scale, in which specificity also requires integration with the regional context. This development, in fact, affects the entire supply chain and tries to achieve an integration that strengthens the global leader city in a given sector.

This is a polarization that tends towards the global monopoly of the sector, which is why cities at the level of capital managed by " hubs " and business centers, whether physical or increasingly dematerialized, will not cease their power. The flows are reoriented and will have consequences in particular on the population that lives or does not live in the cities, differentiating on the basis of specific income. Metropolitan areas produce more than two-thirds of the world's wealth and are centers of cultural and social development whose trends and innovations have an influence that extends far beyond city borders. The dynamics, therefore, will still be entirely urban as regards economic management, the territorial parcelling will occur only at the physical level of the housing-offices, but the digital hierarchy has already shown a considerable centrality already in the past years, which will make a hierarchy centered on the economic dimension is possible.

The expansion of the urban is therefore not a necessary resolution so much so that the same global index and recent studies show how urbanization can be configured as a double-edged sword regarding the perfect size and extension of the city. It is important to arrive at the definition of an urban energy model that remains such, but that Covid has modified and will modify. Understanding the general trends will depend on the answers that will follow. Let's start with an analysis of urban

energy, a qualitative development developed by ISPI in collaboration with Domus<sup>105</sup>. In collaboration with Domus, ISPI has developed a new type of multidimensional study of contemporary cities starting from the methodology of the ICC<sup>106</sup> The presentation of the research reads:

"Each energy index was measured by combining four variables, for a total of twenty different indicators. Economic energy, which includes data on both the productive power and the human capital of a city, is defined by GDP per capita, dependency rate (ratio between over 65 and population of working age), unemployment rate and expectation of life. The kinetic energy index refers to the speed with which people and information circulate in a city, as well as its ability to act as a logistics hub for the surrounding area: the four indicators are the rate of use of public transport, airport traffic (passengers transported on the city population), percentage of homes with internet access, urban congestion (Traffic Index).

Social energy is the attempt to synthesize in an index the ability of a city to integrate fragile or disadvantaged categories into the urban fabric, to contain inequalities and offer spaces for democratic expression; the index includes data on youth unemployment, Gini index, level of democracy (Democracy Index) and percentage of women in the workforce. The fourth index, the attractive energy, is the measure of how much a city manages to make itself "desirable" to citizens, businesses and visitors: the index includes the homicide rate, the number of doctors per 1,000 inhabitants, to business and the average education level of the population.

Finally, the environmental energy index photographs the ecological impact and sustainability of a city by observing the concentration of PM10, CO2 emissions, the recycling rate of urban waste and the presence of informal settlements or slums."

This index is useful for understanding the balance of forces inserted in global cities, consequently if we examine the necessary indications of this study we can observe that the deterioration brought about by Covid could go to act precisely in the sectors in which the global cities of OECD countries are configured in a broader and more marked way. It therefore means that some factors that could be grafted in the near future could lead to dynamics similar to those of third world cities. It is an already active address, with an increasingly fragmented and difficult control of urban network, in which gated-community and gentrification thrive. Consequently, global cities are also structured as

 <sup>&</sup>lt;sup>105</sup> Fabio Parola, Tobia Zevi, *Le città del futuro in 5 dimensioni: l'indice ISPI-Domus*, ISPI online, 2019;
<sup>106</sup> City Prosperity Initiative of UNhabitat;

a guideline as models increasingly based on a functional dynamic of a mechanical and economic type and less and less with a social component and widespread wealth. It is not a question of 'backwardness' of non-OECD cities, but rather of an armor that Western cities still maintain thanks to welfare state systems that are still very present, regardless for the global dynamics that animate these cities.



## 4.1 Spatial and economic flows

The first realization of the new urban order will be expressed in a phase that will see the massive presence of work polarization and the repositioning, in the medium term, of housing. First of all, it should be noted that it is essentially a redefinition between income classes and not so much in the workplace. In fact, what will move the urban relations in the near future, as always, will be the production relations and the economic and labor management technique, but the effects will be only marginally of a working nature, as the main deviations derive from changes and repositioning of income and class order.

## Change of dematerialized workplaces

The first issue to be addressed is dictated by the effects of the change in the world of work and production relations, which are the symbol of the disruption of the current system. The increase in the number of smartworking, not only possible but encouraged, enters the wake of a process that was already beginning to foreshadow itself in previous years, albeit very timidly. This will first of all lead to a decrease in buildings dedicated to this type, combined with their partial conversion into spaces now necessary for the digital economy (in particular data centers and warehouses). We need storage containers for data and goods. In a game of localization of the non-localizable, cities will use the spaces emptied thanks to the infrastructures that will allow it. This could therefore lead, in the countryside and in small towns, to the definitive abandonment of small and scattered offices.

These changes will make smartworking workers on the one hand more focused on their private dimension, on the other trapped. The fewer relationships that will occur within the city will increase its capital and career value. Furthermore, the lesser possibility of establishing new ties will be at the basis of the will to localize the cities of younger subjects, without families and with a constantly building social network, also linked to universities, which will in any case maintain, even with teaching at a distance, a strong permanent vocation. The capital value of the university city will probably slow down, but it will certainly not disappear.

The polarization of those who will be the most inclined and necessary managers of physical places on young people and the middle-to-upper, managerial, will make the capital value of these people even higher, not only for career prospects, but for quality of life and cultural enjoyment relationships. Those who will emerge most deteriorated will be the workers in smartworking, trapped in a situation that, although offering some advantages, will preclude others. This first point already defines a first product of the new model: the social and cultural impoverishment of the middle and lower middle class. What this will mean from a political point of view is unlikely to be able to plan, because it will particularly depend on how the same companies and nations will behave. In fact, the unionization of these environments is not a secondary issue<sup>107</sup>, or the need that will start from the lack of certain and safe safeguards of a whole series of people in smartworking and teleworking. Although some extreme situations have already highlighted this conflict, between companies that need control and others that pass office costs on to workers, we are entering a new world of work with rules that each institution will have to interpret or reinterpret.

# Change of the concept of private dwelling

The direct consequence of the change in employment relationships is the integration of this within the living space. It is a revolution both on location and on people's spatial needs. First of all, situations directly related to the tested place change, in which the potential demand for square meters increases, net of innovative solutions for smartworking at home but which carry with them a whole series of objective problems that remain difficult to sustain in the long term. This particular situation becomes pressing within a context of low size, which will unequivocally lead to giving up the rental dimension to always position oneself close but in a position with more favorable properties. And it is precisely on the subject of leasing that the main game of the next few years will be played.

We talked about of the objective impossibility of dictating precise forecasts since the change in the model and the alterations in the market produced by governments do not allow us to unravel the present to take advantage of objective reality. It was highlighted that the location will be less and less dictated by proximity to services and increasingly concentrated on the home itself, within a sufficiently considerable range of action to continue cultivating one's loved ones. As a result, those who live in distant territories could potentially increase their wealth thanks to a net cut in transport costs, while those who are in the city, paradoxically, would find it more comfortable to go out for a larger house than to remain within the urban context of work.

Similarly, those who do not need a particular location could take advantage of a drop in prices to enter the cities attracted by the need for a potential relational network and experiential and cultural liveability. The choice of location will be all the more extensive and scattered throughout the

<sup>&</sup>lt;sup>107</sup> CGIL press release, Smart working: CGIL 'Futura' Observatory, 8 out of 10 workers ask for a contract, Rome, 23rd October 2020 on www.cgil.it

territory the more the urban system is integrated, and this will make an area a work service for a whole band of global city that will be able to become even more competitive on an international scale following the logic of the supply chain. This theme is closely connected with the mobility, the "kinetic " energy of the ISPI study, which in this context would be weakened in favor of permanent accommodation. However, it should be remembered that in addition to the decrease in transport, the existing infrastructures will not be dismantled, on the contrary it is likely that the greater integration of logistics in the hinterlands and in the countryside will cause a further increase in land consumption, since every single product now can potentially arrive via delivery.

Consequently, if at an environmental level there is an ascertained qualitative improvement in the reduction of emissions, on the other hand it could be replaced by a progressive and indiscriminate (as technically possible) increase in land consumption and logistic delivery. The shift towards the centers will become less likely, with a top range of high mobility, at least potential, while the vast majority will be marked by a decrease in their work in presence compared to 2019.

## Remodeling of the real estate market

Hence it becomes structural that the real estate market is subject to significant changes. This change in market orientation does not currently find a consideration on forecasts because they are based on historical data, avoiding introducing a shift in the type of market as variables. If the market in urban centers will move to properties that have a larger square footage than it is today, it is likely to think that there will be a decrease in the demand for mini apartments that populate the metropolis, and that could be found at the same price as a larger house in less central locations. This will probably not affect the entire student range, but a large part of this market will shrink in favor of better housing in the hinterlands or suburbs.

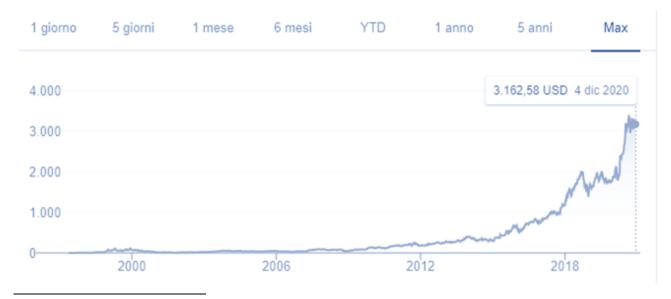
Consequently, this shift could produce a decrease in the value of small apartments because they are considered in many cases not adhering to the needs of the market but, for properties of better quality and size, it could contribute to a further increase, precisely because living in the city, or better , in some areas of the city, it will be increasingly regarded as a luxury. The historically middle-class neighborhoods and the newly built high-end ones will probably continue to exert their power and the divergences between classes will increase. In the hinterlands, in parallel, the demand for greater square footage could cause prices, rising, to force a reverse gentrification, on the contrary, bringing low-income people into urban contexts, in smaller homes, in a second moment, and out of business. We could therefore witness a situation that has already been seen for some time in the

countryside or in peripheral centers, with the influx of low-income people in historic centers, mostly immigrants, who are entering a particularly fragile and complex context.

These variations in housing flows lay the foundations for articulated and complex reasoning, but they also lay urban guidelines that go in the direction of increasing marginalization: some parts of the city are ghettoized in all respects, in favor of others that shine within the global context. Taking up the prediction of Henri Lefebvre's " Business Center ", it is clear that the culmination of this dialectic is the formation of the global apparatus that uses urban scaffolding to feed the citizen speciesism of global cities. Cities therefore risk being more divided than ever with the post-Covid recovery, with the particularity that urban challenges from a political point of view face themselves in a monolithic way. It remains easy to imagine, in fact, that investments will accelerate in some strategic sectors, while others will fall vigorously. Just think of the enormous value of high tech, literally exploded during the days of the spring 2020 lockdown.<sup>108</sup>

## Investment address

What push the Nasdaq in 2020 were the 'Faang': Facebook, Amazon, Apple, Netlifix and Google. All US high-tech brands. Facebook was able to count a 15% rise in profits. Microsoft held up well. Amazon appears to have found the world's treasure in Lockown. Alphabet posted revenue growth of 13% in the first quarter to \$ 41.2 billion.<sup>109</sup> These are assets for about 5 trillion dollars, the equivalent of the GDP of the third global economic power. All this has pushed investments all over the globe in these sectors, suddenly shifting the global market on the axis of corporations.

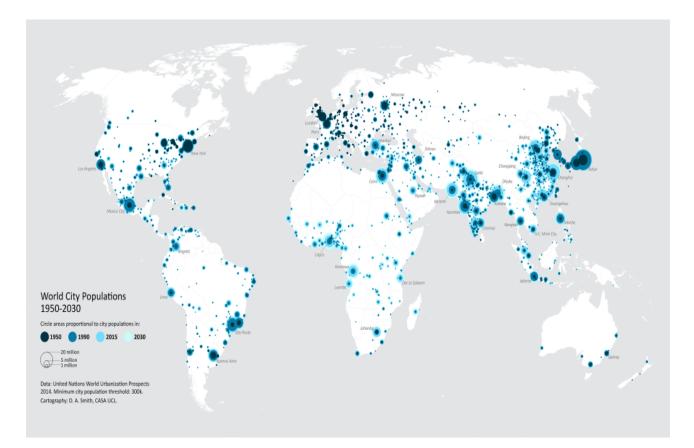


<sup>108</sup> Alessandro Galiani, AGI, *I giganti dell'hi tech sono immuni al coronavirus*, 2nd May 2020;

<sup>109</sup> www.nasdaq.com;

These global companies are now posing as superpowers, capable of bargaining with immense semimonopoly power, which allows them to use the land and the urban area as they please.<sup>110</sup>

These facts can make us aware of the enormous direction that high-tech companies will exercise on global cities, from the point of view of investments, logistics, infrastructure, and so on. These are realities that are the core of the current financial economy and that are very unlikely to stop being so in the near future.



<sup>&</sup>lt;sup>110</sup> Change in the Amazon stock index, Source Nasdaq;

## 4.2 Towards a new identity model

The growing polarization that derives from new forms of urban transformation will not leave the part of the inhabitants who will suffer the most without reactions. The social part that will be found more than others within the cities in the changed context will come to have greater opportunities for the use of *commons*<sup>111</sup>. These diversified and bottom-up realities are likely to be structured also following a structural increase in the cost of fruition of urban and cultural collective life, in the absence of public policy support. By laying the foundations of reaction in the movements to claim rights to the city, the method of action that affects a growing slice of the population will most likely be centered on the creation of grassroots movements and organization.

If on the one hand the growing distance of workers outside the city, due to new working methods, will significantly reduce the experiential component and the cognitive and cultural contamination, the most excluded and least possessors of the means of economic self-determination will find themselves interacting in spaces of collective unease that will manifest themselves as a potential substrate for the growth of urban claims. The thrust of desire to achieve a change of social approach that pushes the revolt, turns into indistinct aggregation, which on the contrary, with awareness and appropriation, can express itself within a renewed urban context.<sup>112</sup>

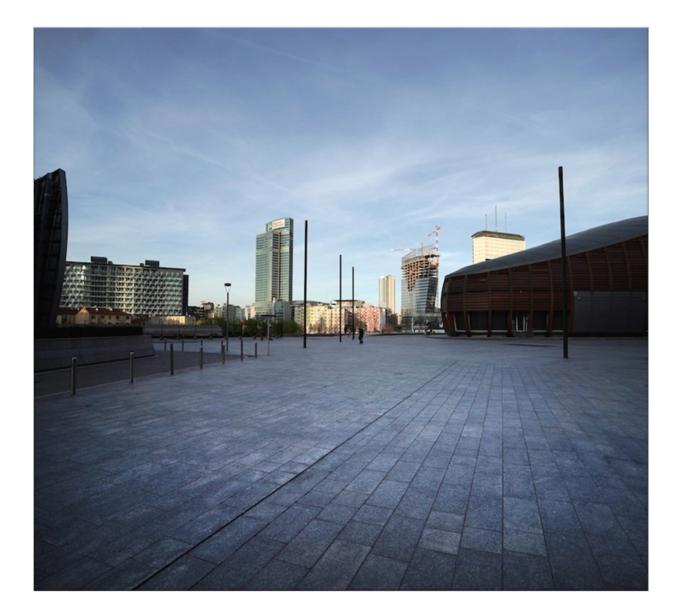
In the long run, therefore, cities will once again be able to reinvent themselves and use their aggregative function to arrive at new definitions of paradigms, including economic ones. However, the process that will see the realization of this reality risks being prefigured as an acquisition of constant exclusion, which proceeds by contrasts, but which nowadays directs more and more towards a growing inequality, which identifies man less and less as a producer but as a mere consumer and extractor. Consumption and consumer data extractor based on the extracted data. The digital definition that pervades the urban impact and the new relations of the world of work raise serious questions because if the struggle between states and global cities is manifested with even more vigor, only with a median relationship will it be possible to arrive at an arrangement of distortions that seem to unfold as necessary.

The Coronavirus epidemic has hit the world, leading it to a sharp turn with unpredictable results, which due to the absence of adequate models manifest themselves in their reality, every day, without certain predictions. But the address before the swerve was clear, which is why this situation

<sup>&</sup>lt;sup>111</sup> Michele Grimaldi, La macchia urbana, Naples, 2018;

<sup>&</sup>lt;sup>112</sup> Massimo Recalcati, *Ritratti del desiderio*, Milan, 2012;

has mostly given an enormous acceleration to phenomena already in progress, which could have been managed in time and with tranquility in their manifestation, but that the situation has to adopt en bloc. The return to "normality " will not be plausible in any case, because every day we are aware of the enormous impact left on human and social action. A basic vision and an analysis of the objectives such as the one we have tried to do is fundamental to be able to reason on fixed points, not so much by taking the previous models and adapting them to the present, but by modifying them on the basis of social change. <sup>113</sup>



<sup>&</sup>lt;sup>113</sup> Milan's "Piazza Gae Aulenti" during the first lockdown, March 2020;

# **Chapter V – Conclusions**

The conclusion of this work wants to systematize a whole series of possible forecasts of urban development explained in the previous chapter. The entire thesis was developed to arrive at considerations on possible urban and economic developments starting from an in-depth analysis of the social, urban and economic changes that have taken place in the last year. The scarcity of available data (in particular in relation to the historical which prevent the perspective of the whole based on analogous situations), necessarily lead to conclusions that are addressed on a probabilistic basis.

The changes that have taken place in every human sphere, judging by the business and systemic economic benefits (first of all smartworking) will necessarily become structural, as well as increasing digitalization trends which, regardless of the financial trend, have undergone a constant boost during the pandemic. The same forced digitization of an enlarged component of the population, which in the old continent has overcome a whole series of barriers, including generational<sup>114</sup> ones, has led to a radical change in personal and working relationships.

Having acknowledged that these changes will not become systemic at a uniform level since an adequate infrastructural and economic network will be needed for them to become endemic, it is appropriate to think that based on the extent of these phenomena there will be changes that will make the forecasts effective, with greater or less intensity.

First of all, the smartworking theme will become structural based on the characteristics of the place:

- Integration of the economic system ;
- Rate of services that can be performed " remotely ";
- Infrastructure development of telecommunications and transport ;

The result is a picture that will lead to an implementation of digital work within those integrated urban components (on a regional scale) that were already inserted in a global context and that will draw new life from a whole series of advantages and lower management costs from real estate point of view. Territories notoriously lagging behind in digitization and less flexible than the previous characteristics, may suffer from further marginalization that may produce new territorial imbalances in internal areas that cannot enjoy the regional presence of an integrated system. By

<sup>&</sup>lt;sup>114</sup> ISTAT Report, *Cittadini e ITC*, Rome, 18<sup>th</sup> December 2019;

way of example, if the Orobic valleys could benefit from smartworking, in the presence of an adequate network, which can reverse or at least slow down the depopulation of the valleys, thanks to the presence of workplaces that can still be easily reached less times a week, on the other depopulated and / or in difficulty such as midday away from metropolitan areas could suffer a further gap. This derives from the diminution of the power of close proximity, which widens its mesh of tolerance but which acts as a further centralizer of the new economic processes.

Similarly, the houses will undergo a variation that is also functional to the place deriving mainly from:

- Presence of integrated economic systems on a regional scale;
- Availability of properties;
- Possibility of satisfying the request for an increase of square meters;

In the integrated areas there will therefore be a double trend relative to the specific case. If, by way of example, the Milanese hinterland could undergo further development leading to gentrification in the external areas already prepared (as in the ex-expo area of Rho-Pero) it is possible that the internal areas undergo further peripheral<sup>115</sup> systems especially in the areas in to which the apartments are configured as less suitable for an "office" spatial integration.

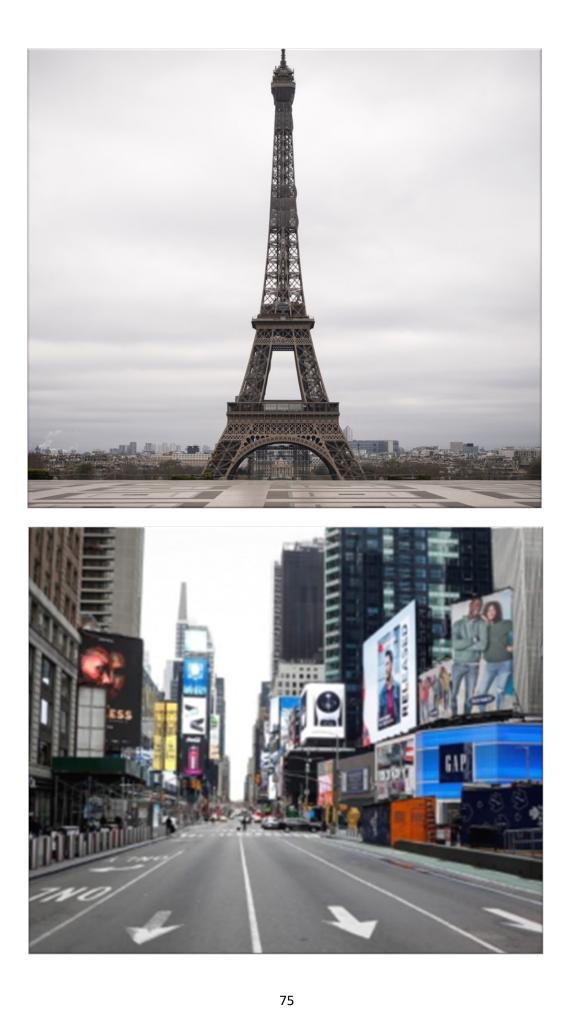
This component would inevitably lead to a demarcation between those who are the " excluded " and those who are integrated into the system, at multiple levels. If on the one hand a series of people (workers, temporary workers, etc.) will not be able to participate in the smartworking component due to objective necessities, on the other a part of the same components of the system would be partially excluded from the relational and aggregative component of the cities and places of production " in presence ". In the areas excluded from the integrated processes described above, we will instead see a probable further explosion of depopulation. Paradoxically, we will see, in parallel with the development of remote work, a further approach in integrated areas, those highlighted as the " engines of development " will therefore emerge strengthened.

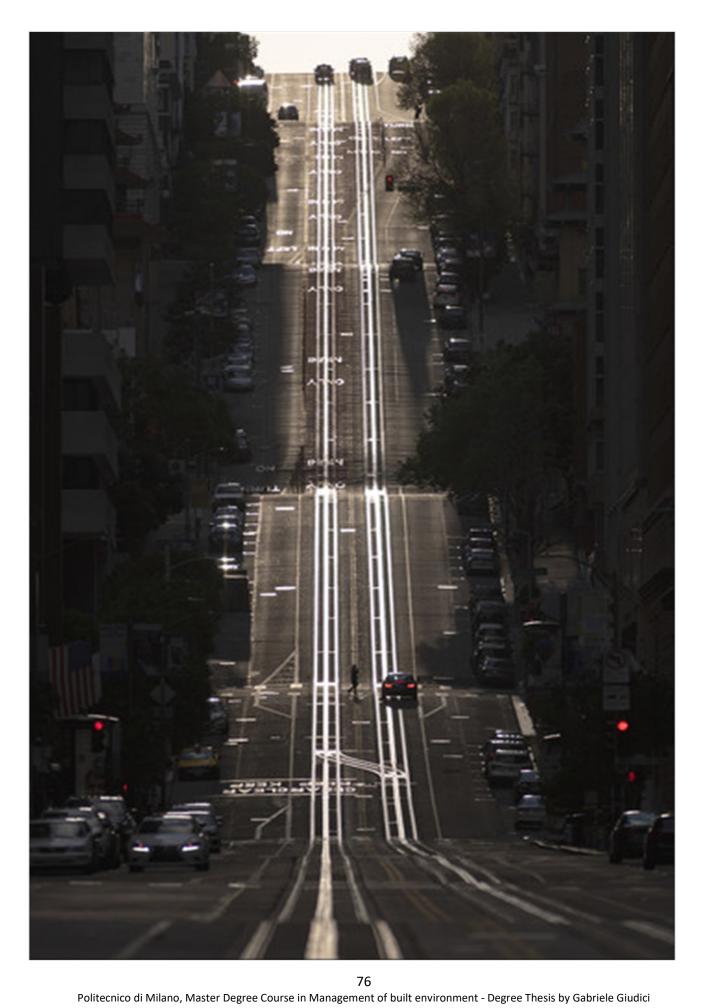
The full application of the components could arrive at full speed based on political guidelines. If it seems inevitable that the public parties will endorse smartworking, seen as " inevitable ", despite the fact that there has been internal resistance to the cities in terms of urban consumption, expressed at the end of Phase 2 of the emergency. The core of the planning and policy reasoning

<sup>&</sup>lt;sup>115</sup> Agostino Petrillo, *La periferia non è più quella di un tempo*, Rome, 2021;

should be to limit the distortions of the system that will manifest themselves, imposing on the one hand the prohibition of a total extraneousness to the working activity in the presence, although this is already evident from the point of view of the productivity to be part of the companies themselves; and on the other hand to safeguard again the territories that risk a new and more violent exclusion from economic processes.







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