Urban Planning
2024 • Volume 9 • Article 8654
https://doi.org/10.17645/up.8654

ARTICLE

Open Access Journal

No City for Workers: Housing Affordability Trends and Public Policy Implications in Milan

Massimo Bricocoli and Marco Peverini

Department of Architecture and Urban Studies, Politecnico di Milano, Italy

Correspondence: Marco Peverini (marco.peverini@polimi.it)

Submitted: 10 May 2024 **Accepted:** 26 September 2024 **Published:** 14 November 2024

Issue: This article is part of the issue "Housing Affordability Crisis: How Can We Address It?" edited by Ajay Garde (University of California – Irvine) and Qi Song (University of California – Irvine), fully open access at https://doi.org/10.17645/up.i344

Abstract

As the housing affordability crisis strikes many cities around the world, public institutions and citizens have started to become aware of growing problems in the access to adequate affordable housing. The issue is particularly evident in Milan, where increased attractiveness is paralleled by a huge rise in housing prices. This article presents the results of research conducted by the Affordable Housing Observatory of Milan, contributing to public knowledge on housing affordability problems and envisioning possible policies to tackle them. Housing issues are contested and political in nature, and in the Italian context the debate is often led by the voice of the real estate sector while data are highly fragmented and knowledge about housing affordability is limited, especially in Milan. We fill this gap by conducting an original analysis of existing public data on the housing market, the labour market and incomes to highlight the trends in housing affordability in Milan. We focus on the period starting in 2015, a turning point for Milan with the international EXPO and the beginning of an intense phase of urban transformation and real estate development. The article shows how the increase in housing prices and rents has outpaced growth in incomes and wages by nearly a factor of three and how a major share of income earners in Milan cannot afford decent housing. These trends expose lower-income residents to the risk of expulsion and condition access to a job in the city to ownership of assets or financial assistance from parents (especially for first-time buyers and the younger generations). Finally, the article reflects on the implications of growing unaffordability with reference to policies targeting housing costs, incomes, and wages.

Keywords

housing affordability; housing observatory; housing policy; Milan

1. Introduction

An essential condition for living in a city is being able to bear the costs of housing, an issue generally summarized within the concept of housing affordability (Haffner & Hulse, 2021). Housing affordability refers to the ability of households to sustain housing costs in relation to their socioeconomic conditions, particularly incomes and wages. Academic discussion of housing affordability began at the end of the 19th century with studies on poverty in industrial cities and the issue has exploded cyclically in relation to crises and periods of urbanization (Haffner & Hulse, 2021). It became a central focus of political movements and public policies in the post-WWII era, then falling into the background of the public debate with the advancing homeownership society and the residualization of housing policies. Today, new dynamics affecting cities, such as the commodification and financialization of housing (Madden & Marcuse, 2020), touristification, and increasing urbanization of capital and people (Camagni, 2016; Glaeser, 2011), have drawn renewed attention to affordability.

While phenomena such as commodification and financialization have recently attracted a consistent amount of research in the urban studies literature, in-depth and contextualized quantitative analysis of housing affordability trends have remained relatively unexplored (Haffner & Hulse, 2021). A large amount of literature shows that affordability problems tend to concentrate in attractive cities (Haffner, 2018; Whitehead & Goering, 2020) and many authors suggest addressing the affordability crisis from the vantage point of cities (Wetzstein, 2017). In the current economic phase, financial investments overwhelmingly target urban real estate and large social and political blocs measure the success of cities and their governments according to the growth of property values and the ability to attract capital and resources (Engelen et al., 2017). Against this narrative, however, the trend of real estate values and territorial attractiveness should be compared to the effects of real estate dynamics in terms of diseconomies, inequalities and exclusion from the benefits of urban life for those who contribute to life in the city but are unable to bear the costs individually (Bricocoli & Salento, 2019; Cavicchia & Peverini, 2021). This can be linked to housing affordability, as many authors point out that cities risk becoming increasingly unaffordable as they become more attractive (Wetzstein, 2017). In this light, there is increasing interest in investigating the urban dimensions of housing affordability (Haffner & Hulse, 2021; Wetzstein, 2017).

Following this perspective, we investigate the trends and traits of the affordability crisis in Milan. Despite a labour market whose wages are among the lowest in Europe and in a context that has seen increasing commodification and financialization of the real estate market, the relationship between housing costs and incomes in Italy has been systematically ignored and depoliticized (Storto, 2018; Tulumello & Caruso, 2021). Moreover, regional disparities across Italy are a solid feature on the national level and inequalities are growing significantly in more attractive cities, while a significant part of the country is affected by depopulation and abandonment (Coppola et al., 2021; Moscarelli & Peverini, 2024; Viesti, 2021). In this context, affordability is becoming a concern, especially for those urban agglomerations that prove capable of attracting populations despite the country's demographic stagnation, with Milan as the most outstanding case. In the past century, the city of Milan has faced significant influxes of internal migration and the conditions and criticalities of accessing adequate housing have been extensively analysed and documented in research (Alasia & Montaldi, 1960/2010). Today, however, traits are emerging that show access to housing to be increasingly complex and multifaceted: the unprecedented increase in renting after the long growth of homeownership, the commodification of housing and the extensive financialization of the housing market, and the increased competition by tourism and short-term renting (Cavicchia & Peverini, 2021). These trends are accompanied by the residualization of public housing policies and the increasing devolution of housing to the private market (Belotti & Arbaci, 2021; Coppola et al., 2023). In Milan (as in several global cities with a similar attractiveness), the ratio of housing costs to incomes is increasingly considered a threat by citizens, public institutions and more recently by employers as they struggle to meet their need for workers (Bricocoli & Peverini, 2024). Since spring 2023, students have started protesting insistently against high rents, drawing attention to the affordability issue and calling for more sensitivity on the issue of housing costs as a threat to the right to education. Yet despite growing sensitivity to housing costs, we are still far from any real shift in the introduction of more adequate policy tools or the perspective of a more effective (and inclusive) housing policy.

Amid this background and inspired by international examples, we founded the Housing Affordability Observatory (*Osservatorio Casa Abbordabile*) in 2022 to monitor the dynamics of housing affordability in the city of Milan. The observatory is a partnership between the Department of Architecture and Urban Studies at the Politecnico di Milano and the Milanese housing cooperatives Consorzio Cooperative Lavoratori and Libera Unione Mutualistica (more information is available on the website: www.oca.milano.it). This article presents the results of extensive data collection and analysis carried out within the observatory on housing costs (rents, mortgage costs), incomes and wages to understand recent developments in housing affordability in Milan from 2015 to 2022 (the most recent data available). The starting year was chosen due to the symbolic turning point represented by the international exposition held in Milan, when an intense phase of urban and real estate development began again, together with the unprecedented growth of tourism in the city. The goal of this article is to answer the following research questions: "Has Milan become less affordable since 2015?" and "How did affordability develop in different segments of the housing market?" We respond to these questions by analysing and processing data on the housing and labour markets to provide evidence for the trends in housing affordability in Milan in the period 2015–2022. Our research could be easily replicated in other cities—in Italy or elsewhere—with a comparison of the results for a better understanding of current affordability.

The article is organized as follows: Section 2 illustrates the theoretical framework, Section 3 the materials and methods, and Section 4 the results. Section 5 discusses the data while Section 6 presents some conclusions and policy implications.

2. Housing Affordability as the Outcome of a City's Housing and Labour Markets

Affordability is a key indicator of a city's inclusiveness, especially when measured on the way people access housing (Cavicchia & Peverini, 2021). A lot of literature has shown that the concept of housing affordability has no unique interpretation and affordability measurements face important methodological challenges (Bramley, 2012; Chaplin & Freeman, 1999; Stone, 2006). Research on the topic has seen at least three phases (Haffner & Hulse, 2021). First, from the late 19th through the first half of the 20th century, housing affordability measurements were ingrained in research into the cost of living and poverty. Second, in the second half of the 20th century, attention shifted to "budgets"—the total income needed for all important necessities—as an aspect of poverty and urban problems, which led to the development of the residual-income approach (Stone, 2006). Third, at the beginning of the 21st century, scholars have called for new ways of conceptualizing affordability that effectively consider the urban dimension, analytically exploring and problematizing its urban aspect (Haffner & Hulse, 2021). The renewed "urban" focus means that scholars often concentrate on attractive cities, which are confronted today with an increase in housing costs that puts low-income groups in great difficulty (Wetzstein, 2017). While we consider this as part of a larger phenomenon of territorial concentration (Moscarelli & Peverini, 2024), we also believe that in-depth, contextualized research on the affordability issue is urgently needed. We therefore situate our study in this third period, focusing on a specific city, Milan, and framing affordability as the outcome of its housing and labour markets, a rather new direction for this research.

The connection between housing and poverty is well established in the literature; scholars often connect affordability with poverty and in-work poverty, i.e., the condition of being absolutely poor despite having a job. The implications for cities are less explored, however (Haffner & Hulse, 2021). With respect to Italy, a study of census data using a residual income affordability measure showed that absolute poverty approximately doubles in Italy when considering housing costs (Palvarini, 2010). Instead, the relationship between housing costs and wages, a classic economic issue, is relatively underexplored in the urban studies literature. However, conditions of housing affordability are increasingly also a matter of concern for workforce recruitment and tied to trends in the labour market, as institutions acknowledge a mismatch between the location of jobs and housing (Eurostat, 2016; Haffner & Hulse, 2021). This topic is particularly important in Italy, the only OECD country where wages have declined in real terms since the 1990s and where one job is often "not enough" for paying housing costs (Filandri, 2022). A recent study of Italy using Eurostat data shows that housing affordability affects poor in-work tenants, mortgaged homeowners—almost regardless of the location (even in rural areas)—and low- to middle-income households, especially when renting in larger cities (Colombarolli, 2024). This trend jeopardizes the ability to form a family and the feasibility of work mobility, as access to housing for the younger generations in Italy strongly depends on financial or parental help (Filandri & Bertolini, 2016). These findings push us to further investigate the relationship between housing and labour market in Milan, framing it in terms of affordability.

While we concentrate on affordability trends and connect them to the labour market, we consider the affordability level as one outcome of a city's economy and urban development model. The critique of contemporary capitalism is useful for framing the affordability issue as a problem of distribution. Starting from the three factors of value distribution identified by Marx—wages, profits, and (land) rents—scholars have shown that the increase in value appropriation by the rising rentier bloc—through both immaterial and spatial processes that increase land rent such as housing financialization and gentrification—jeopardizes both wages and profits, diverting resources away from production (Harvey, 1985; Ryan-Collins et al., 2017; Vercellone, 2008). Since the financial crisis, there is a new emphasis on urban land rent as a primary factor in housing affordability problems (Arbaci et al., 2020; Camagni, 2016; Haila, 2016; Peverini, 2023; Piketty, 2014; Pizzo, 2023; Ryan-Collins, 2018). An often-cited study found that the sharp rise in housing prices since the 1990s is primarily explained by skyrocketing land rents (Knoll et al., 2017). In Italy, housing prices tripled in real terms from the 1970s to the global financial crisis, and economic evidence shows that two thirds of this growth is explained by the rise in land rents (Cannari et al., 2016). Moreover, a long-term study of Italian gross domestic product found a decline in the labour share partially due to the recovery in profits, and largely due to a steady increase in housing rents (Torrini, 2016). Additionally, many authors also argue that in post-industrial economies, profits and land rents tend to have matching characteristics, as profits are often reinvested in rent, but there is a real distinction between wages and land rents (Pizzo, 2023). Interestingly, Vercellone (2008) includes the wage of working categories related to functions of capital coordination (i.e., managers) in the realm of land rent. These theoretical vantage points (supported by extensive econometric evidence) help us see the current affordability issue not so much as a market failure tied to supply shortages, but rather as an issue of the distribution of economic value produced in a city (Arbaci et al., 2020). In this sense, an increasing number of scholars have proposed a shift away from the mere housing shortage aspect of the affordability problem (Ermgassen et al., 2022; Rodriguez Pose & Storper, 2020). In this light, we consider housing affordability as a multifaceted result of the local housing market that needs to be contextualized for different income profiles and wages in the local labour market, reflecting the distribution of economic value generate by (and in) a city through labour and production or through rent extraction (Andreucci et al., 2017).

With respect to the operating definition of affordability, a critical review (Peverini, 2023) showed that housing may be considered affordable if: 1) prices and rents are below the market price of a particular property class ("below market"); 2) prices and rents are the mere sum of production costs ("at cost rent"); 3) the share of disposable income spent on accommodation is below a certain level for a specific household ("cost to income"); 4) enough dwellings in a given market are cost-to-income affordable for particular income categories ("housing accessibility"); 5) the residual income after housing costs for a specific household is above a minimum ("residual income"); or 6) the share of disposable income spent on accommodation and transport for a specific household in a specific place is below a certain level ("housing+transport") or, more generally, if one considers other location-related expenditures ("location affordability"). In sum, housing affordability refers to the economic conditions confronted by people and households in certain socioeconomic conditions to access and maintain housing (usually low- and middle-income households) within a housing market. In this perspective, affordability is a measurable characteristic of any type of housing (whether public, social, or private) connected to its quality and location (Cavicchia, 2021; Peverini, 2023). In the related concept of housing accessibility (Neuteboom & Brounen, 2011), affordability is a crucial factor indicating the degree to which a city is accessible to newcomers, especially low- and middle-income people, and how the city can be an inclusive platform for socioeconomic improvement or a poverty trap leading to expulsion of the most vulnerable. We acknowledge the complexity of the literature and choose to use a definition like the one for housing accessibility, by measuring cost-to-income affordability in the segments of access to housing through rental contracts and mortgages for specific working categories. The remainder of the article explains further this approach and applies it to measuring affordability trends in the city of Milan.

3. Materials, Methods, and Context

As explained above, we address the research questions by comparing trends in net incomes, wages (per work category), sales prices, and rents. Trends are indexed and compared for the 2015–2022 period, therefore adjustment for inflation is not needed. Below we describe characteristics and methodological issues of every indicator.

For incomes, we rely on data collected by the Ministry of Economy and Finance (MEF) on personal income tax (IRPEF), recording the income sources and amounts of each individual taxpayer (MEF, 2024). This is the only publicly available data on individual incomes in Italy that is not based on surveys but strictly on administrative data, thereby allowing for small-scale analysis. In Milan, taxpayers constitute approximately 68% of residents. The data are released yearly for each municipality. The latest release refers to 2022, since tax declarations are due on the year following the earnings and the data are released in spring of the subsequent year. Among other items, IRPEF data include (per year): gross income for all municipal taxpayers; number of municipal taxpayers; and total amount of income tax. Net average income may be easily calculated by subtracting the total amount of income tax from the total gross income and dividing the result by the number of taxpayers.

For wages, the main data source is the Italian National Institute for Social Security (INPS), which releases annual data on the labour market and wages on the provincial level. We focus on employees in the private sector, who account for 71.8% of workers in Milan (Figure 1). INPS provides information on contracts and wages, broken down by sector and aggregated by province (INPS, 2024). Unfortunately, data on a smaller scale are not available, but approximation is acceptable if one considers the supra-local integration of the labour market of Milan (around half of workers live outside the main municipality). Based on the open data provided by INPS, we break down workers in the private sector for 2022 (latest release) into the four qualifications used by INPS (Figure 1), which are described as follows: "Manager" is an employee in charge of directing the company or an important independent branch thereof; "Middle manager" is an employee whose functions hold significant importance for the purposes of continuously developing and implementing the company's objectives; "White-collar worker" is an employee assigned to conceptual or orderly activities inherent in the organizational and technical-administrative procedures of the company, aimed to assist the entrepreneur or manager's activities; and "Blue-collar worker" is an employee assigned to duties strictly inherent in the company's production process. Unemployment tends to be low in Milan (4.8% of the population aged 15–65) compared to the rest of the country (7.8%). Nevertheless, job insecurity and in-work poverty are important issues among workers (Filandri, 2022). In this sense, focusing on private employees is a simplification, as they tend to have rather stable incomes compared to other, more unstable worker categories, which reach almost one third of all workers in Milan according to one of the main

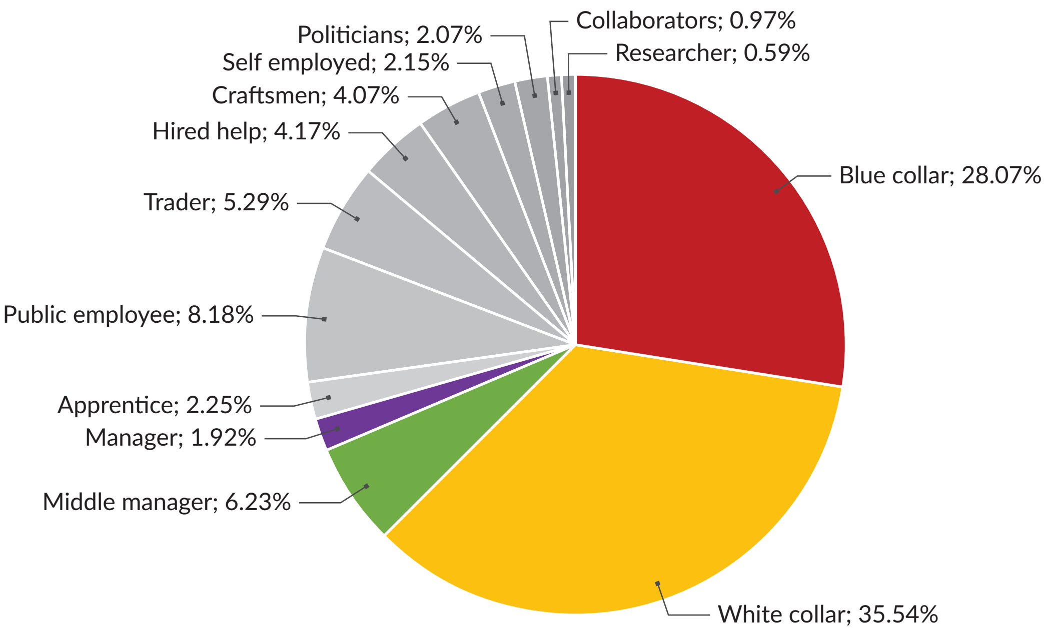


Figure 1. Workers by sector in Milan in 2022. Coloured sectors identify the four main segments of the private job market identified by INPS and analysed in this article, constituting 71.8% of the total workforce in the city (for clarity, the colours are the same as in Figure 4). Grey sectors indicate other segments of the job market that are not included in our analysis. Prepared by the authors using INPS data (INPS, 2024).

workers' union (CGIL, 2024). This simplification means that we are generally underestimating the issue but is acceptable as we want to investigate affordability trends for the main body of workers in Milan and does not weaken our findings as we will see.

For housing prices, we rely on the housing prices index calculated every year since 2010 by the National Statistics Office (ISTAT); the data are publicly available. Data are released for the whole country and for a selected number of municipalities, including Milan. For rents, the situation is more complex. In contrast to the sale market, statistical information on the rental market is limited (Loberto, 2019). Since an official rental market index does not exists, we mainly rely on data provided by the Observatory of the Real Estate Market (OMI) under the National Revenue Agency (OMI, 2024). Despite improvements implemented in 2016, the quality and granularity of OMI data for the rental market is lower than the sales market, but it remains the main available data source (Loberto, 2019). The OMI database provides information on the whole county and for a selected number of major municipalities (including Milan) regarding rents, the number and type of rental contracts, the floor area of the dwelling, and the size of the rental market in a given geographical area measured as the percentage of new leases. Data on rental contracts are based on the new leases registered by the National Revenue Agency every year and are categorized in four contract types (see Section 4.1). Data on leases of less than one year are not registered by the National Revenue Agency, representing a limitation to this source of data given the recent spread of short- and medium-term rentals; while they can be estimated using scraping portals, we concentrate on longer-term leases as more adequate to the needs of a worker. Other limitations include the possible effect of tax evasion and missing or reduced declarations, resulting in underestimated rent levels. Therefore, we consider OMI data as generally underestimating affordability problems.

To overcome these limitations, scholars and analysts started using new sources of information represented by real estate portals. One of the main portals in Italy is Immobiliare.it (www.immobiliare.it). According to Loberto (2019), data from Immobiliare.it can capture spatial heterogeneity in rents, although there is a significant positive gap between the estimates of the average rents requested and actually paid. In addition, the dynamics of the rents demanded by landlords closely approximates the rents charged. The main criticality is that the leases on the portals do not observe the effective rents, i.e., those stipulated between the contracting parties, and do not represent all rents (as houses may be rented outside the portals, usually at lower rents). In other words, the portal data probably overestimate actual rents, thereby overestimating affordability issues. Although some people argue that overestimation problems are rather small (Loberto, 2019), the database should first be purged of multiple offers or offers that remain in the portal too long (e.g., because they are overpriced), something which is hard to perform from outside the platform. Additionally, Immobiliare.it does not release aggregate data on the number of leases, but only on average rent levels.

Given the disadvantages of each indicator, we decided to use both. We extracted OMI data on rental contracts from the yearly report released by the National Revenue Agency, which is currently available for the 2015–2023 period. Then we compared the average rent per square meter per year for each type of rental contract and calculated a weighted average rent per square meter per year for Milan. We collected data from Immobiliare.it on the average rental price per square meter for the entire municipality of Milan for each year directly from the website. Although the rental data are only available for new leases, leases in Italy are time-limited (the longest period is four years, but leases are often shorter) and tenants must eventually renew or sign a new contract (except in public housing and in some rental cooperatives which, however, is not so relevant as turnover is very low). Therefore, we consider this a significant indicator of the affordability trend.

4. Key Affordability Trends in Milan

In this section, we present the findings of our research on economic capacity (incomes and wages) and housing costs (prices and rents), that allow us to compare the two.

4.1. Trends in Economic Capacity (Incomes and Wages)

The average net gross yearly income of taxpayers in Milan increased from €31,705 in 2015 to €37,583 in 2022 (+19%). At the same time, the average net yearly income of taxpayers in Milan grew from €23,290 in 2015 to €27,570 in 2022 (+18%), as shown in Figure 2. Information on the distribution of gross individual yearly income is divided into the seven income tax brackets, as shown in Figure 3, unveiling a significant polarization: one third of taxpayers earn less than €15,000 gross per year and 55% earn less than €26,000.

Figure 4 shows how wages per job category changed over the period in question. The distribution of wages among the four categories is highly unequal, with managers' wages almost six time the average (Figure 4). Moreover, while average wages grew 12.87% between 2015 and 2022, the wages earned by blue-collar workers grew 8.9%, those of white-collar workers grew 9.9%, and managers' wages grew 15.2%. This reveals a polarized income situation and labour market structure that is increasingly unequal.

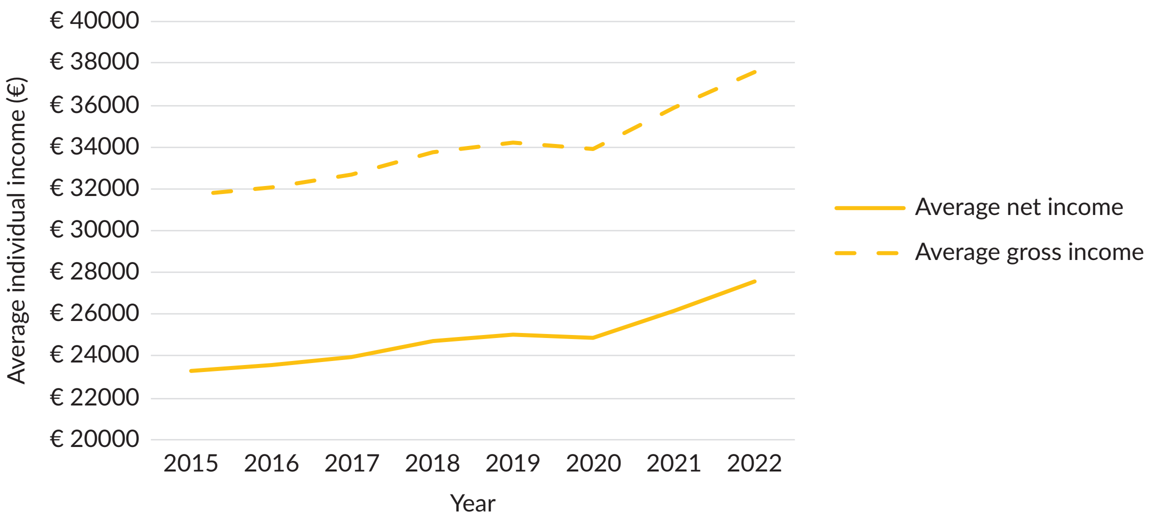


Figure 2. Average gross and net individual income of taxpayers (after tax) in the municipality of Milan, 2015–2022. Prepared by the authors using MEF data (MEF, 2024).

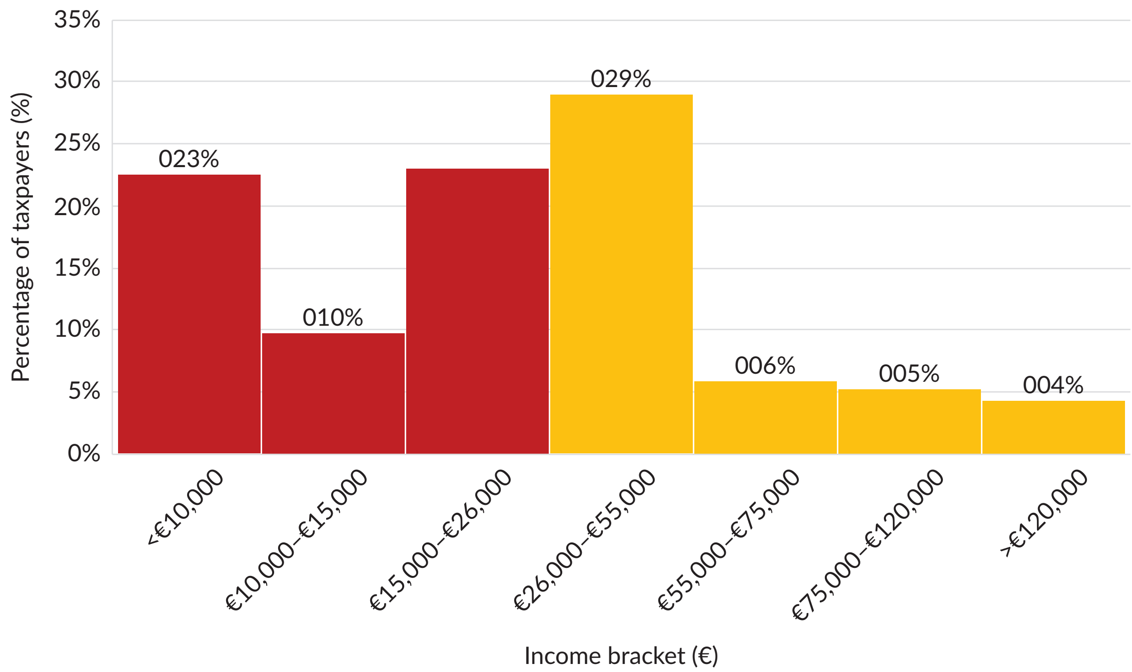


Figure 3. Distribution of gross taxpayer income (before tax) in the municipality of Milan, 2022. The tax brackets below €26,000 in gross yearly income (approximately 60% of taxpayers) are shown in red. Prepared by the authors using MEF data (MEF, 2024).

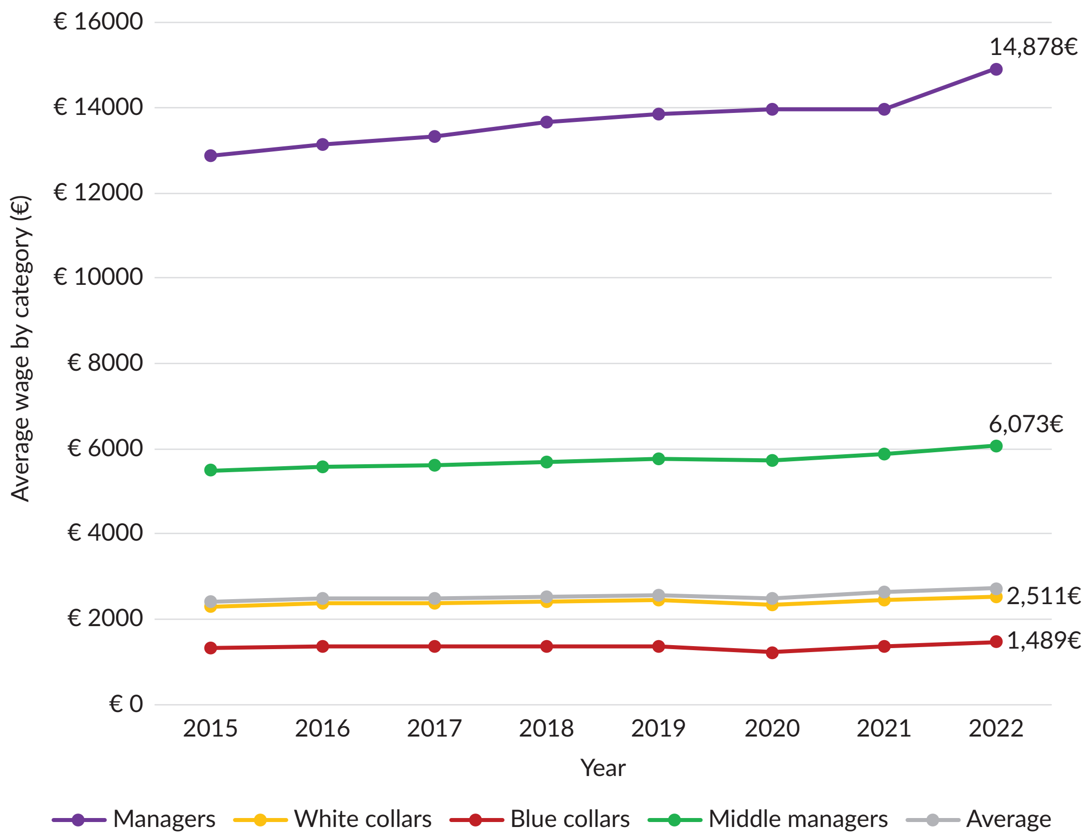


Figure 4. Gross average wages of full-time workers in the private sector in Milan, 2015–2022. Prepared by the authors using INPS data (INPS, 2024).

4.2. Trends in the Housing Market (Housing Prices and Rents)

According to data collected by ISTAT, average housing prices in Milan recorded a 50.1% increase between 2015 and 2022, with existing housing prices growing more than new housing prices (also representing a much bigger part of sales; Figure 5).

With respect to the rental market, the first important aspect is that the number of leases grew from around 40,000 new leases in 2015 to 51,821 in 2022, with a stunning +30% increase between 2015 and 2022 (Figure 6). However, by looking "within" the rental market we can identify the main factors driving this growth. The Italian rental law 431 of 1998 allows four types of rental leases: 1) long-term contracts: free market contracts with a duration longer than 3 years (this theoretically includes public housing contracts, but the number can be considered negligible); 2) medium-term contracts: free market contracts with a duration between one and three years; 3) agreed-rent contracts (*canone concordato*): an incentivized contract on the private rental market in which rents must be fixed within a maximum range negotiated among local stakeholders (mainly tenants' unions, landlords' associations, the municipality, etc.) in exchange for tax benefits; and 4) moderate rents for students: similar to agreed rents. Contractual rent adjustments for inflation are allowed in the first two categories according to national law, except if landlords opt for an alternative (reduced) flat tax. Introduced when the process of tenure restructuring toward increased home ownership was still highly active, agreed-rent contracts were supposed to be the main incentive to keep rents low in the private rental sector. This measure was regarded as promising in situations where ownership of the rental sector had become increasingly fragmented, as in Milan, but it ended up having a negligible quantitative effect: the protected share of the market (agreed-rent and student contracts) remained close to

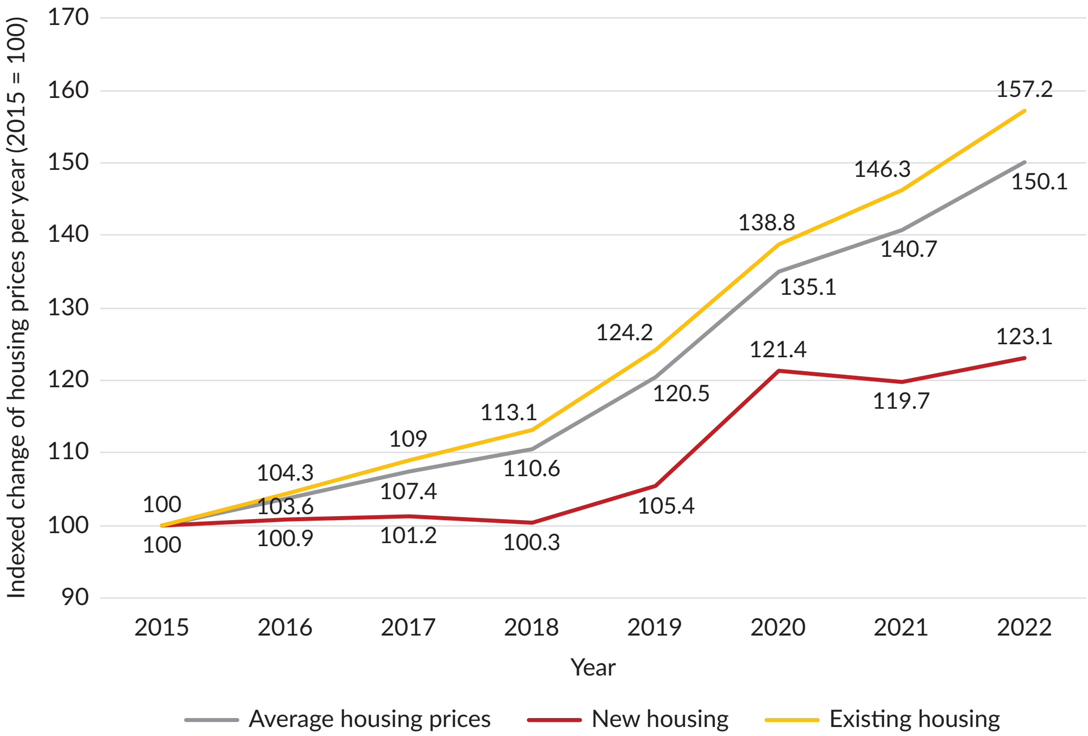


Figure 5. Index of average housing prices (and detail of new and existing housing) from 2015 to 2022 in the municipality of Milan (2015 = 100). Prepared by the authors using ISTAT data (ISTAT, 2024).

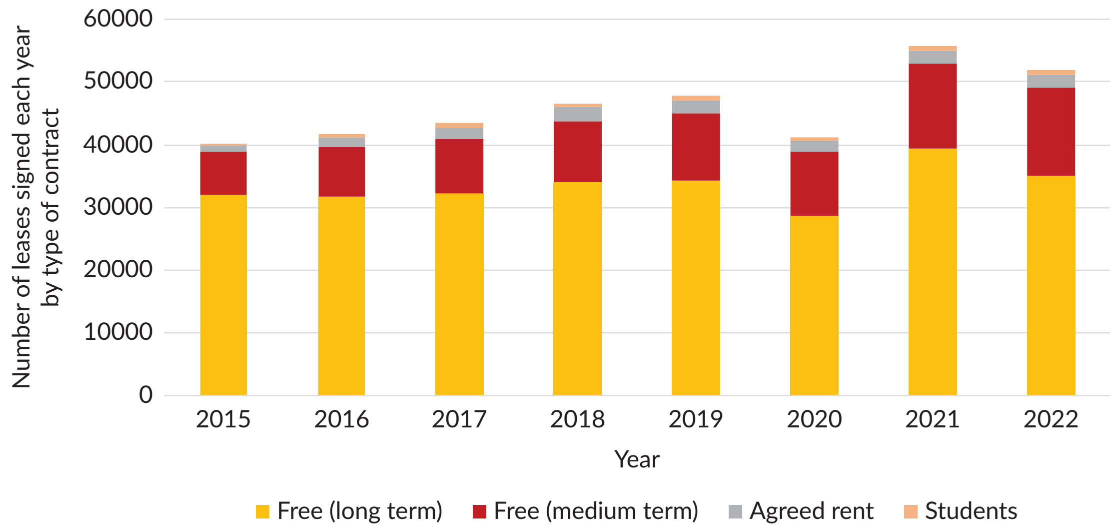


Figure 6. Number of leases signed each year by type of contract between 2015 and 2022. Prepared by the authors using OMI data (OMI, 2024).

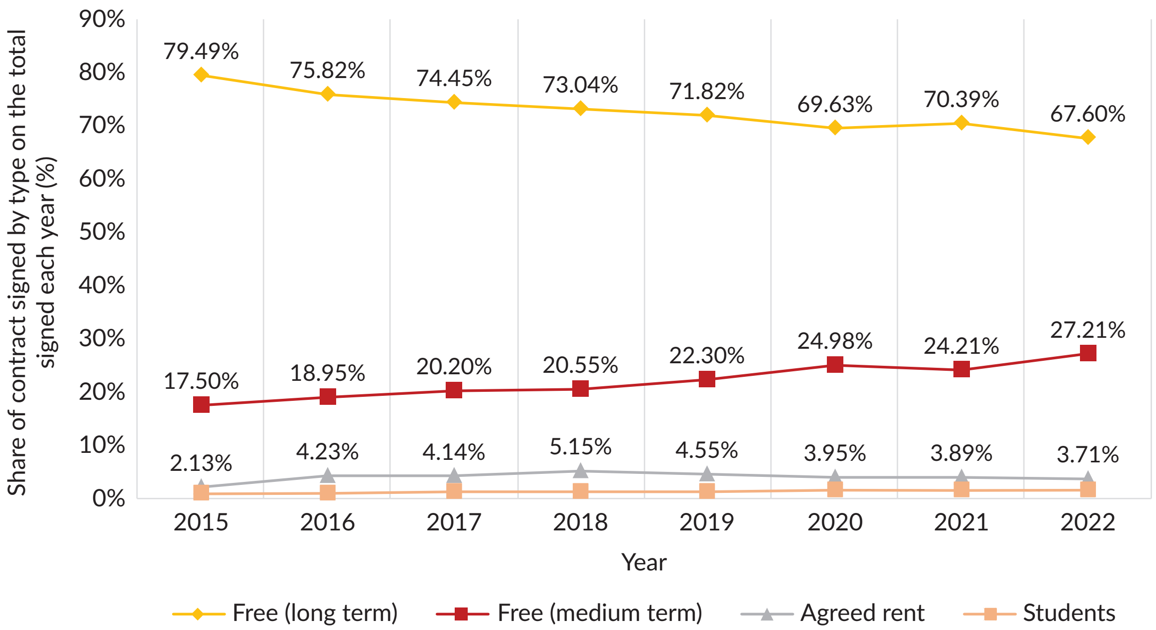


Figure 7. Leases by type of contract per year, 2015–2022 (%). Prepared by the authors using OMI data (OMI, 2024).

5% of the total market, without showing relative growth or shrinkage (Figure 7). Instead, full market medium-term leases (one to three years) grew from 17.5% in 2015 to 27.2% in 2022 (+100% in absolute terms) while long-term leases decreased from 79.5% in 2015 to 67.6% in 2022 (only +9% in absolute terms), as shown in Figure 7.

Yearly rent levels (Figure 8) show a very compact trend: all types of contracts registered by the OMI grew continuously (with few exceptions) in the 2015–2022 period. Considering OMI contracts, the general weighted average grew from €130/m^2 per year to €173/m^2 per year (+33%), mainly driven by the growth of

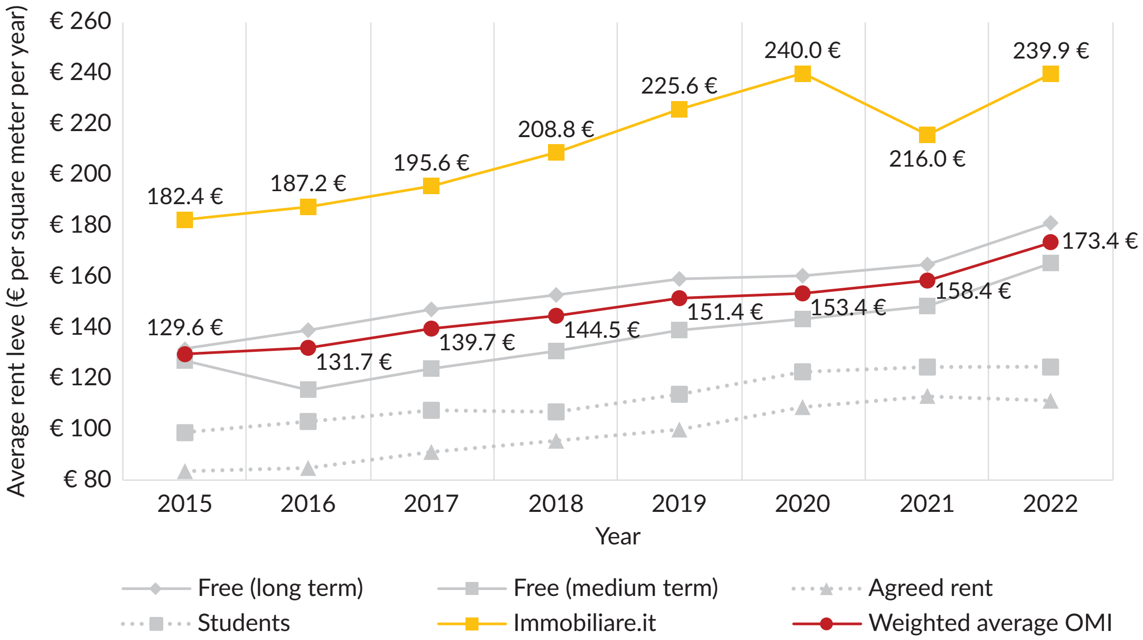


Figure 8. Yearly rent level per rental segment in Milan, 2015–2022 (€/(m^2*yr)). Prepared by the authors using OMI (OMI, 2024) and Immobiliare.it data (Loberto, 2019).

rent levels in long- and medium-term contracts. In comparison, Immobiliare.it registered a significant drop in rents in 2021 following the pandemic (whose effect seemed to be recovered already the following year), moving from €182/m^2 per year in 2015 to €240/m^2 per year in 2022 (+32%).

4.3. Comparison of Incomes, Wages, Rents, and Prices

Figure 9 shows a single graph of the results and depicts a growing gap between housing costs and available economic resources. In sum, housing prices in Milan are growing 2.7 times faster than incomes and wages, and rents are rising almost twice as fast. However, if we look at the stagnant wages of the lower-middle categories—referred to as blue-collar and white-collar workers in the official classification, who together account for 61% of workers in Milan—purchase prices are growing 5.5 times faster than blue-collar wages and 5.0 times faster than white-collar wages; rents are growing 3.7 and 3.4 times faster than the average wages of these two categories, respectively.

5. Discussion

Trends in housing prices and rents in Milan have departed from income and wage trends, increasing national and local concerns (Filandri, 2022). We have shown that in the 2015–2022 period, average purchase prices for housing in Milan grew almost three times (2.7) faster than average incomes and more than five times faster than the wages of the two largest employment categories (accounting for around 61% of workers in Milan). Average rents for new leases grew almost two times (1.9) faster than average incomes, and almost four times faster than the wages of the two largest employment categories. For a growing part of the population—especially the part that relies on wages or social support instead of wealth—sustaining the cost of a decent home, whether bought or rented, is becoming harder. Our findings agree with international evidence that

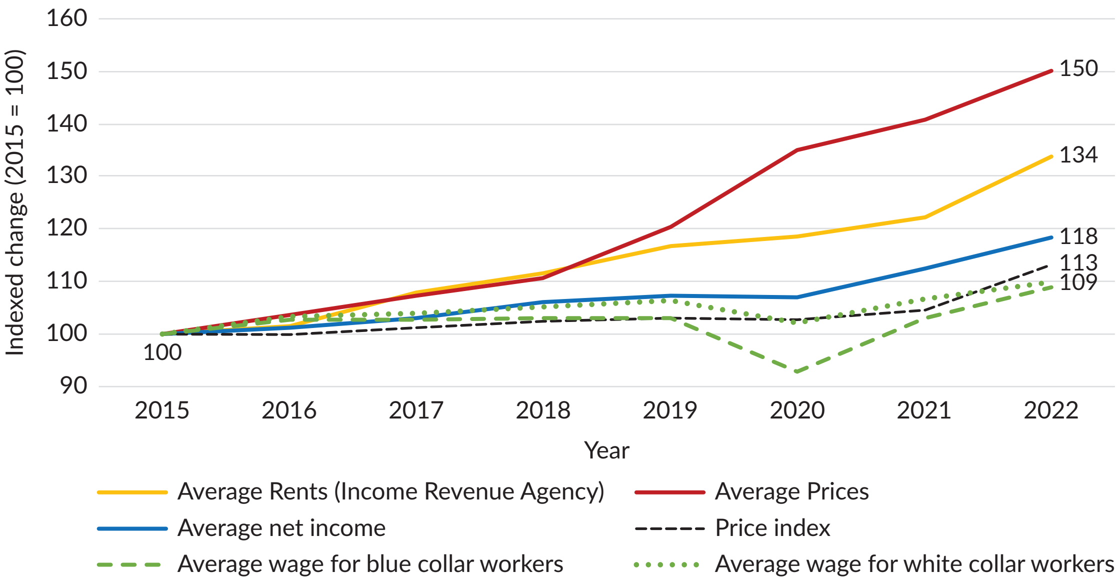


Figure 9. Trend of average housing prices, rents, average net income of taxpayers in Milan 2015–2022, and net wages.

points to an increasing reliance on existing wealth to access housing rather than incomes and savings (Filandri, 2022). However, the situation in Milan is particularly serious regarding wages, with Italy showing the only negative trend in real wages in the last thirty years among OECD countries (INAPP, 2023).

Additionally, we have shown that the gross individual income in Milan is below €15,000/year for a third of taxpayers and below €26,000/year in 55% of cases, and that nearly two thirds of Milanese workers have rather low, stagnant wages compared to growing wages for the smaller proportion of managers. In addition, the unemployment rate is not irrelevant, and the labour market features a significant number of unstable contracts, especially in the predominant service sector. These factors make it virtually impossible to meet the requirements to access a mortgage or even a rental contract relying on typical wages, making traditional housing pathways inaccessible for the younger generations (Costarelli, 2023): the same occurs in many other international settings (McKee et al., 2017). Our findings for Milan resemble that of many other attractive cities, where growing unaffordability paired with increased inequality induce competition in access to housing and draw fault lines between winning and losing social categories in the urban economy (Camagni, 2016). Data on increasing housing costs also suggest growing inequalities between insiders and outsiders in the housing market, as incomes and wages lag behind housing (and other living) costs and become secondary to wealth in determining the quality of life of people. Our findings ultimately corroborate theoretical statements that land rent appropriation is overcoming economic growth (Piketty, 2014).

Due to such trends, Milan has a weak capacity to welcome a multitude of different individuals and households and offer them opportunities for multiplying and combining their skills, expertise and ideas (Fincher & Iveson, 2008). Low-income households, and especially young people and immigrants, risk being excluded from access to housing and participating to the distribution of value produced by the city agglomeration. The growth of real estate in Milan, paralleled by polarization of economic opportunities and marginalization of other Italian territories (Moscarelli & Peverini, 2024; Viesti, 2021), also risks excluding those who would migrate there to study and work from less affluent areas if they do not possess enough financial resources. In this situation, the Milan economic system continues to rely heavily on the hinterland to provide space for workers. In the peripheral, suburban and peri-urban areas, the construction sector continues to benefit from a surplus of unsatisfied demand from the main municipality as lower- to middle-income households start to be expelled by the central city, as suggested by previous findings on similar periods of economic growth in Milan (Camagni et al., 2002). For many people, the only option is to relocate to the metropolitan area in the absence of adequate conditions of urban quality, services, and mobility.

6. Conclusions and Policy Implications

While the city of Milan attracts international capital and functions, it is becoming increasingly exclusive and unsustainable for everyone who needs to access housing without relying on personal wealth. Our findings show that between 2015 and 2022, housing prices grew almost three times faster than average disposable incomes, and more than five times faster than average net wages of blue- and white-collar workers in the city. This trend exposes low-income households to the risk of expulsion and conditions access to work in the city on previous homeownership or financial help (especially for first-time buyers and the younger generations). The fact that the average wages of broad categories of workers lag far behind the growth of housing costs underlines the paradox of an urban economy that undermines the very basis upon which it stands.

The public and academic debates are starting to acknowledge the relevance of affordability as a core issue for the future of the city, but unaffordability trends are growing very quickly, and a political solution might come too late. If the trends continue as shown here, housing prices could double by 2030 (on the 2015 value) while wages would grow by less than half. Amid growing rental tenures and job precariousness, this could be reflected in a dramatic increase in housing exclusion and distress. This has relevant policy implications that we would like to discuss.

The need to provide affordable housing is hotly discussed and there is vast literature on opportunities and limitations in affordable housing policies, though how to provide affordable housing within global ecological boundaries is still debated (Belotti et al., 2023; Ermgassen et al., 2022; Foundational Economy Collective, 2022; Peverini, 2023). Besides housing provision, however, many point at the development of an adequate transport infrastructure that can provide access to a larger housing "basin" in the larger metropolitan area (Bricocoli & Salento, 2019). While the connection between housing and transportation is much discussed, we consider labour to be fundamental factor in reshaping territories and cities. The housing-labour nexus is a matter of study and research worthy of far more interest and contributions from labour economists, social scholars and political scientists (Filandri, 2022). Based on our research, we can draw some preliminary conclusions and notes for a perspective debate. Our results show that in Milan, the growth of housing costs is much faster than the increase in wages. Beside acknowledging the rise in housing costs, making it public that wages in such a vibrant and attractive city are so modest for a vast proportion of workers could raise awareness and concerns in the public debate over the various factors that "produce" the affordability crisis. The fact that housing prices and rents grow significantly faster than wages contributes to framing the issue as one of fairness in the distribution of economic value produced by the city, allowing for a broad discussion around the implications of the phenomenon for public policies. In fact, Article 36 of the Italian Constitution establishes the principle that wages must always be "sufficient to ensure a free and dignified existence for oneself and one's family" (Senato Della Repubblica, 1947/2003, p. 21; our translation).

One criticism concerns the question of whether housing "alone" can solve the issue of income and wage inequality (Haffner & Hulse, 2021). The issue is debated, but we can say that if housing plays an important role in determining the distribution of resources, labour and welfare policies play also an important role. Comparative research on housing systems in Milan and Vienna has shown that in the latter, not only are social housing supply and rent regulation policies much more relevant, but also that there is also a substantial safety net (consisting mainly of rent payment subsidies and income support; Peverini, 2023). In general, greater integration between social and housing policies is highly desirable, even for maximizing devices and tools for social support and inclusion that are sometimes already available but do not always converge (Belotti et al., 2023). In this context, raising wage levels for lower qualifications seems to be a solution to the affordability problem. However, there are two risks to seriously consider. One concerns the possibility of granting increases on a local basis related to the higher cost of living. An emblematic example is London. According to the policy of London weighting, certain key labour categories (mainly in the public sector) are entitled to a supplementary allowance over the national wage designed to compensate for the higher cost of living in the capital. In Italy, something similar is being discussed regarding "wage cages" (*gabbie salariali*), a system that defines wages locally according to certain parameters such as the local cost of living. This system was in effect in the 1950s and 1960s but was abolished following strong mobilization by the trade unions, which considered the policy discriminatory and unfair (De Blasio & Poy, 2014). Such policies raise relevant concerns. Amid severe territorial inequalities across Italy and the polarization of economic opportunities in an increasingly limited number of places (Coppola et al., 2021), high housing costs in major cities can be considered one of the few factors that disincentivize further concentration, and a differentiated wage system could trigger further outflow from parts of Italy that are already shrinking. The second risk concerns the likelihood of capitalization whereby in a situation of unregulated supply and low elasticity, the benefits or tax relief is absorbed (in whole or in part) by an increase in housing costs (Matsaganis, 2011). Given the low elasticity of the residential market even in Milan, this means that the benefits granted to workers in terms of higher wages would be largely capitalized in housing prices and rents. To have a positive effect on affordability, a policy of demand support should therefore be combined with policies to contain prices, regulate supplies, and increase the share of price- and (especially) rent-controlled housing provisions.

Besides the labour market, our findings support the theoretical assumption that land rent is the real "elephant in the room" in the rise in contemporary issues of unaffordability in attractive cities (Peverini, 2023; Pizzo, 2023). Our data for Milan show that the main issue lies in the housing and urban development model, as it is unable to adjust the conditions of housing access to the local labour market. As the growth of housing prices and rents far exceeds the growth of incomes and wages, we can conclude that in Milan land rent is "eating up" most of the value produced by the city economy, jeopardizing both the profit and wage components (Ryan-Collins et al., 2017; Vercellone, 2008). Comparative evidence shows that land rent can be more equally and efficiently captured by the public sector and redistributed to lower income households in forms of lower housing costs, e.g., via land policies, taxation or direct social housing provisions (Camagni, 2016; Peverini, 2023). In some cases, this also means renouncing development opportunities that show high trade-offs with access to housing, such as tourism based on short-term renting, or "taming" the real estate sector by demanding more in terms of land value capture or inclusionary zoning. This is a difficult path, as it departs from the development model that inflated the attractiveness of Milan, but it is necessary as current trends are undermining the vary basis of its prosperity.

Acknowledgments

We would like to thank the members of the OCA international scientific board (Sonia Arbaci, Jennifer Barenstein, Giustina Orientale Caputo, Roberta Cucca, Marianna Filandri, Giovanni Hänninen, Angelo Salento, Raffaella Saporito) and of the OCA internal board (namely: Vincenzo Barbieri, Alessandro Galbusera, Alessandro Maggioni, Claudio Palmerini, Antonio Valenti, Federica Verona) for their precious contributions to the research.

Conflict of Interests

The authors declare no conflict of interests.

Data Availability

Data used for this article is publicly available via the institutional webpages of the mentioned institutions.

References

Alasia, F., & Montaldi, D. (2010). *Milano, Corea. Inchiesta sugli immigrati negli anni del "miracolo."* Donzelli. (Original work published 1960)

Andreucci, D., García-Lamarca, M., Wedekind, J., & Swyngedouw, E. (2017). 'Value grabbing': A political ecology of rent. *Capitalism Nature Socialism*, *28*(3), 28–47. https://doi.org/10.1080/10455752.2016.1278027

Arbaci, S., Bricocoli, M., & Salento, A. (2020). The value of the city. Rent extraction, right to housing and conflicts for the use of urban space. *Partecipazione e conflitto*, *14*(2), 774–787. https://doi.org/10.1285/i20356609v14i2p774

Belotti, E., & Arbaci, S. (2021). From right to good, and to asset: The state-led financialisation of the social rented housing in Italy. *Environment and Planning C: Politics and Space*, *39*(2), 414–433. https://doi.org/10.1177/2399654420941517

Belotti, E., Bricocoli, M., Sabatinelli, S., & Savoldi, P. (2023). *Le risposte locali ai bisogni abitativi. Report della missione valutativa per il Consiglio Regionale Lombardo*. Dipartimento di Architettura e Studi Urbani.

Bramley, G. (2012). Affordability, poverty and housing need: Triangulating measures and standards. *Journal of Housing and the Built Environment*, *27*(2), 133–151. https://doi.org/10.1007/s10901-011-9255-4

Bricocoli, M., & Peverini, M. (2024). *Milano per chi? Se la città attrattiva è sempre meno abbordabile*. Letteraventidue.

Bricocoli, M., & Salento, A. (2019). Housing and the grounded city: Rent extraction and social innovations. In F. Barbera & I. Rees Jones (Eds.), *The foundational economy and citizenship: Comparative perspectives on civil repair* (pp. 129–159). Policy Press.

Camagni, R. (2016). Urban development and control on urban land rents. *Annals of Regional Science*, *56*, 597–615. https://doi.org/10.1007/s00168-015-0733-6

Camagni, R., Gibelli, M. C., & Rigamonti, P. (2002). *I costi collettivi della città dispersa*. Alinea.

Cannari, L., D'Alessio, G., & Vecchi, G. (2016). I prezzi delle abitazioni in Italia, 1927–2012. *Banca d'Italia, Questioni di Economia e Finanza (Occasional Papers)*, 2016(333), 1–27.

Cavicchia, R. (2021). Are green, dense cities more inclusive? Densification and housing accessibility in Oslo. *Local Environment*, *10*, 1250–1266. https://doi.org/10.1080/13549839.2021.1973394

Cavicchia, R., & Peverini, M. (2021). Housing affordability and the city. Disentangling the urban and spatial dimensions of housing affordability in Europe. In *Proceedings of the 2021 ENHR Conference* (pp. 440–457). ENHR.

CGIL. (2024). *Milano al lavoro 2023*. Camera del Lavoro.

Chaplin, R., & Freeman, A. (1999). Towards an accurate description of affordability. *Urban Studies*, *36*(11), 1949–1957. https://doi.org/10.1080/0042098992692

Colombarolli, C. (2024). Are the in-work poor more disadvantaged in urban areas? An analysis of housing affordability in Italy. *Housing Studies*. Advance online publication. https://doi.org/10.1080/02673037.2024.2369144

Coppola, A., Cordini, M., Belotti, E., & Bortolotti, A. (2023). Milan: Housing financialization amidst state retrenchment and planning liberalization. In A. Holm, G. Alexandri, & M. Bernt (Eds.), *Housing policy under the conditions of financialization* (pp. 117–140). Sciences Po Urban School.

Coppola, A., Del Fabbro, M., Lanzani, A., Pessina, G., & Zanfi, F. (2021). *Ricomporre i divari. Politiche e progetti territoriali contro le disuguaglianze e per la transizione ecologica*. Il Mulino.

Costarelli, I. (2023). *Politiche abitative e giovani generazioni. Il caso di Milano*. FrancoAngeli.

De Blasio, G., & Poy, S. (2014). The impact of local wage regulation on employment: A border analysis from Italy in the 1950s. *Journal of Regional Science*, *57*(1), 48–74. https://doi.org/10.1111/jors.12301

Engelen, E., Froud, J., Johal, S., Salento, A., & Williams, K. (2017). The grounded city: From competitivity to the foundational economy. *Cambridge Journal of Regions, Economy and Society*, *10*(3), 407–423. http://dx.doi.org/10.1093/cjres/rsx016

Ermgassen, S., Drewniok, M., Bull, J., Corlet Walker, C., Mancini, M., Ryan-Collins, J., & Serrenho, A. (2022). A home for all within planetary boundaries: Pathways for meeting England's housing needs without transgressing national climate and biodiversity goals. *Ecological Economics*, *201*, Article 107562. https://doi.org/10.1016/j.ecolecon.2022.107562

Eurostat. (2016). *Urban Europe. Statistics on cities, towns and suburbs, 2016 edition*. Publications Office of the European Union.

Filandri, M. (2022). *Lavorare non basta*. Laterza.

Filandri, M., & Bertolini, S. (2016). Young people and home ownership in Europe. *International Journal of Housing Policy*, *16*(2), 144–164. https://doi.org/10.1080/14616718.2015.1130606

Fincher, R., & Iveson, K. (2008). *Planning and diversity in the city: Redistribution, recognition and encounter*. Palgrave Macmillan.

Foundational Economy Collective. (2022). *Foundational economy: The infrastructure of everyday life*. Manchester University Press.

Glaeser, E. (2011). *Triumph of the city: How urban spaces make us human*. Pan Macmillan.

Haffner, M. (2018). Housing affordability in the European Union. *Informationen zur Raumentwicklung*, *2018*(4), 23–33.

Haffner, M., & Hulse, K. (2021). A fresh look at contemporary perspectives on urban housing affordability. *International Journal of Urban Sciences*, *25*(1), 59–79. https://doi.org/10.1080/12265934.2019.1687320

Haila, A. (2016). *Urban land rent. Singapore as a property state*. Wiley.

Harvey, D. (1985). *The urbanization of capital. Studies in the history and theory of capitalist urbanization*. Johns Hopkins University Press.

INAPP. (2023). *Rapporto 2023. Lavoro, formazione, welfare. Un percorso di crescita accidentato*.

ISTAT. (2024). *Prezzi delle abitazioni, nota metodologica*. Ufficio statitstico.

Knoll, K., Schularick, M., & Steger, T. (2017). No price like home: Global house prices, 1870–2012. *American Economic Review*, *107*(2), 331–353. https://doi.org/10.1257/aer.20150501

Loberto, M. (2019). *Il mercato degli affitti nelle città italiane: Un'analisi basata sugli annunci online* (Working paper no. 1228). Banca d'Italia.

Madden, D., & Marcuse, P. (2020). *In difesa della casa. Politica della crisi abitativa*. Editpress.

Matsaganis, M. (2011). *Estimating the distributional effects of mortgage interest tax relief in Europe* (Working paper no. 1105). Department of European and International Economic Studies, Athens University of Economics and Business. https://ideas.repec.org/p/aue/wpaper/1105.html

McKee, K., Moore, T., Soaita, A., & Crawford, J. (2017). 'Generation rent' and the fallacy of choice. *International Journal of Urban and Regional Research*, *41*, 318–333. https://doi.org/10.1111/1468-2427.12445

Ministry of Economy and Finance. (2024). *Nota metodologica*. Direzione Studi e Ricerche Economico-Fiscali, Ufficio di Statistica.

Moscarelli, R., & Peverini, M. (2024). Cambiare prospettiva sulla crisi abitativa: Oltre i confini urbani del fabbisogno. *Territorio*, *105*, 78–85. https://doi.org/10.3280/TR2023-105011

National Institute for Social Security. (2024). *Osservatorio sui Lavoratori dipendenti, Nota metodologica*. Ufficio di Statistica.

Neuteboom, P., & Brounen, D. (2011). Assessing the accessibility of the homeownership market. *Urban Studies*, *48*(11), 2231–2248. https://doi.org/10.1177/0042098010385155

OMI. (2024). *Nota metodologica locazioni*. Ufficio statistiche Agenzia delle Entrate.

Palvarini, P. (2010). *Cara dolce casa. Come cambia la povertà in Italia dopo le spese abitative* [Paper presentation]. Terza Conferenza ESPANET, Senza Welfare? Federalismo E Diritti Di Cittadinanza Nel Modello Mediterraneo, Milan, Italy.

Peverini, M. (2023). *Promoting rental housing affordability in European cities. Learning from the cases of Milan and Vienna*. Springer. http://dx.doi.org/10.1007/978-3-031-43692-5

Piketty, T. (2014). *Capital in the twenty-first century*. Harvard University Press.

Pizzo, B. (2023). *Vivere o morire di rendita. La rendita urbana nel XXI secolo*. Donzelli.

Rodríguez-Pose, A., & Storper, M. (2020). Housing, urban growth and inequalities: The limits to deregulation and upzoning in reducing economic and spatial inequality. *Urban Studies*, *57*(2), 223–248. https://doi.org/10.1177/0042098019859458

Ryan-Collins, J. (2018). *Why can't you afford a home?* Polity Press.

Ryan-Collins, J., Lloyd, T., & Macfarlane, L. (2017). *Rethinking the economics of land and housing*. Bloomsbury.

Senato Della Repubblica. (2003). *Costituzione della Repubblica Italiana*. Ufficio delle informazioni parlamentari, dell'archivio e delle pubblicazioni del Senato. (Original work published 1947)

Stone, M. E. (2006). What is housing affordability? The case for the residual income approach. *Housing Policy Debate*, *17*(1), 151–184.

Storto, G. (2018). *La casa abbandonata. Il racconto delle politiche abitative dal piano decennale ai programmi per le periferie*. Officina edizioni.

Torrini, R. (2016). *Labour, profit and housing rent shares in italian GDP: Long-run trends and recent patterns* (Working paper no. 318). Banca d'Italia. https://www.bancaditalia.it/pubblicazioni/qef/2016-0318/index.html?com.dotmarketing.htmlpage.language=1

Tulumello, S., & Caruso, N. (2021). "[La casa] non è più sexy in Italia." The absent politicization of housing in Italy, insights from Turin. *Partecipazione e conflitto*, *14*(2), 870–895. http://dx.doi.org/10.1285/i20356609v14i2p870

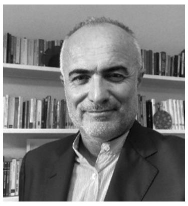
Vercellone, C. (2008, February). *The new articulation of wages, rent and profit in cognitive capitalism* [Paper presentation]. The Art of Rent, London, UK. https://shs.hal.science/halshs-00645055v1

Viesti, G. (2021). *Centri e periferie. Europa, Italia, Mezzogiorno dal xx al xxi secolo*. Laterza.

Wetzstein, S. (2017). The global urban housing affordability crisis. *Urban Studies*, *54*(14), 3159–3177. https://doi.org/10.1177/0042098017711649

Whitehead, C., & Goering, J. (2020). Local affordable housing dynamics in two global cities: Patterns and possible lessons? *International Journal of Urban Sciences*, *25*, 241–265. https://doi.org/10.1080/12265934.2020.1828147

About the Authors



Massimo Bricocoli is the head of the Department of Architecture and Urban Studies at Politecnico di Milano, where he is full professor in Urban Planning and Policies. His research focuses on housing policies and projects, urban regeneration, and local welfare. On these topics he has extensive experience in coordinating research projects and advising and supporting local governments and public authorities. He is co-founder and the scientific coordinator of OCA—Observatory on Affordable Housing in Milano (www.oca.milano.it).

Marco Peverini is assistant professor at the Department of Architecture and Urban Studies (DAStU) of Politecnico di Milano. He develops his research within OCA—Observatory on Affordable Housing in Milano (www.oca.milano.it). He focuses on the topic of housing affordability, in the research framework that investigates social sustainability in urban planning. He is part of the Foundational Economy Collective and co-coordinator of the working group "Social Housing: Institutions, Organisation and Governance" of the European Network of Housing Research (ENHR).