ESPON

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Inspire Policy Making with Territorial Evidence

CASE STUDY REPORT //

Territorial impacts of COVID-19 and policy answers in European regions and cities

City of Amsterdam

Case Study Report // November 2022

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Executive Summary

This case study report is part of a wider ESPON study on the territorial impacts of the Covid-19 pandemic in Europe and the policy response by countries, regions and cities. The case studies sought to investigate the degree to which proactive corona policies (i.e. policies which sought to use the crisis as an opportunity to tackle other issues) were established at the regional or local level and to estimate their impact. In order to ensure cross-case comparability, the structure and approach of this report is identical to the other case study reports. For example, Section 3 contains an extensive overview of relevant policies implemented in the Netherlands with respect to the just, green and smart transitions. In addition, the period under investigation conformed to that of the project as a whole: up to September 2021, roughly the first three waves of the pandemic.

Among other things, the research found:

- The impacts of the pandemic in Amsterdam were in many ways atypical for the country, given the economic structure oriented towards tourism and international business as well as prevailing issues of labour market shortage, rapidly rising housing prices and growing social inequality.

- Not the municipal or regional government was responsible for coordinating the Covid-19 response, but the national government. This prioritized public health and the economy (averting a recession). Social and environmental policies were more decentralized.

- Little evidence was found of proactive policy at the national level. The strategy was overwhelmingly reactive, although the pandemic did heighten the urgency of reforming the healthcare system and linking this to social policy.

- The policy response at the municipal level was largely reactive as well. In some cases, however, Amsterdam accelerated the achievement of other goals during the pandemic. These were largely in line with existing strategies or priorities, rather than being caused by the crisis.

- The rapid mobilization of authoritative experts and academics during the first wave to provide insights and recommendations to the municipality can be considered a best practice.

- By taking a long-term approach in drawing up its Environment and Planning Strategy, Amsterdam was able to look beyond the current crisis and address structural concerns, making it more resilient to external shocks.

- The pandemic impacted governance. Coordination between healthcare providers, insurers and the municipality intensified. In addition, the municipal political culture became more holistic and cooperative. Finally, regional coordination was not hampered, and perhaps even facilitated by increased digitization.

- The Netherlands was the only country in the European Union not to have submitted a recovery plan during the period under investigation. As a result, less explicit emphasis was placed on using to crisis to further the just, green and smart transitions than other case studies. Given the budgetary constraints in Amsterdam, EU money could have supported the implementation proactive policies.

1 Introduction

This case study report examines the policy response to Covid-19 within the Amsterdam region. The report explores which 'proactive' policies have been introduced in response to the pandemic and assesses whether the crisis presented a 'window of opportunity' for regional and local authorities to promote specific spatial planning and territorial targeted policy agendas, especially when it comes to 'green', 'just' or 'smart' goals. The case report is structured around the following core sections:

1. **Regional Characteristics:** Outlines the key socio-economic and governance characteristics of the region.
2. **Impact of Covid-19:** Highlights the socio-economic impacts of the pandemic on the region.
3. **Covid Policy Response:** provides an overview of the regional policy response in relation to three core policy thematic areas - the just transition (social policies), green transition (climate policies) and smart transition (innovation policies).
4. **Covid Policy Impacts:** assesses the main socio-economic, governance and financial impacts of the policy measures introduced.
5. **Future Policy Directions:** examines the medium- and long-term direction of policy in the region and analyses whether the policies identified can be upscaled to other EU regions.
6. **Policy Recommendations:** provides policymakers and practitioners with policy, governance, territorial and financial recommendations.

1.1 Research Methods

The present case study was conducted following a two-step approach. In a first step, extensive desk research was carried out with the aim of 1) documenting the main characteristics of the area, 2) assessing the impact of the pandemic on local society and economy according to various national and local statistical sources, and 3) documenting policy responses as reflected in policy documents and online media outlets. In a second step, semi-structured online interviews were carried out with representatives of key local institutions, non-governmental organizations, the private sector and other experts. The purpose of the interviews has been to further document the impact of the pandemic, the policy responses, the impact of the policy responses, as well as the future of local and regional policies. In general, we found a plethora of written documentation existed in the Netherlands and that various online tools were available for the collection and analysis of statistical data.

Given that the Amsterdam case study was part of a wider European project, the data collection and methods had to be coordinated in a way to enhance cross-case comparability. Due to limited data availability in some case study regions, it was decided to focus on the first year and a half of the pandemic, namely March 2020-September 2021 which roughly corresponds to the first three waves of the pandemic. Although this was largely adhered to, in some instances the Amsterdam case includes information up to the end of 2021 (fourth wave).

Figure 1 Waves of the COVID-19 pandemic

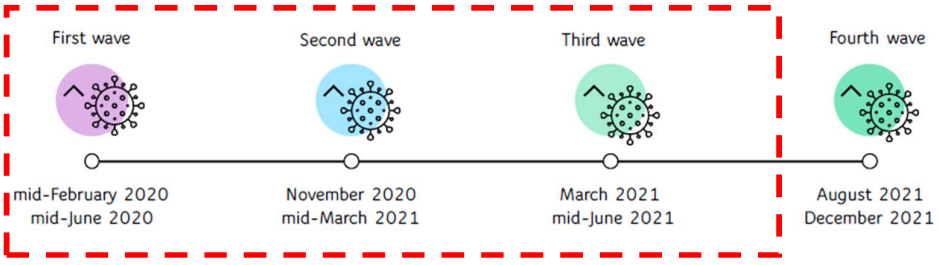


Table 1 lists the people interviewed for this case study. Given the level of scale and the policy focus, the main stakeholders approached for an interview were from the municipality of Amsterdam. To cover the just transition, we interviewed a policy advisor to the city council on social issues. To cover the green transition, we interviewed another policy advisor to the city council specializing in physical policies. This was supplemented by a respondent from the department of sustainability and planning. The smart transition was covered via an interview with Amsterdam's innovation team. Finally, because the Amsterdam University of Applied Sciences was conducting similar research, we had a few interviews with that project team to compare notes.

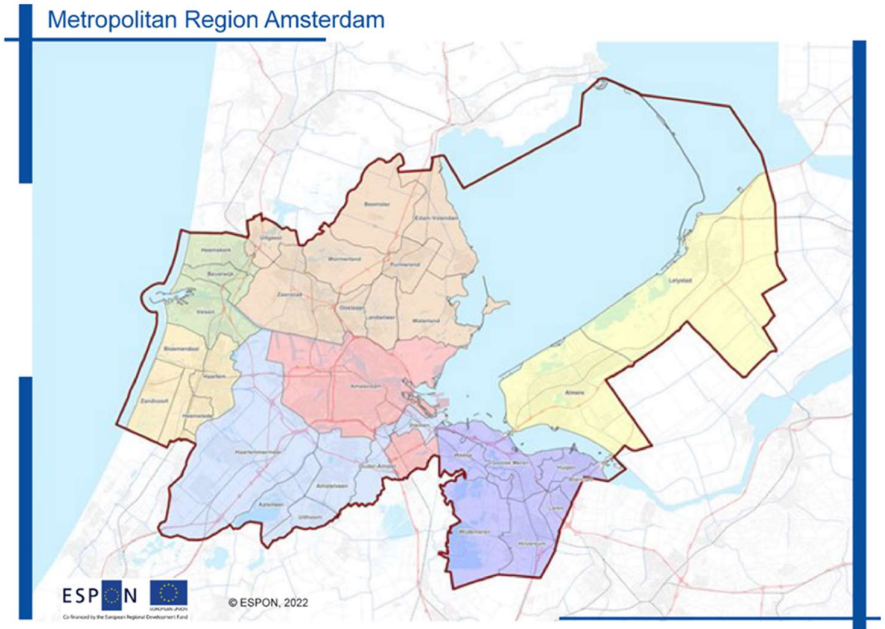
Table 1 List of conducted interviews

	Sector	Stakeholder	Date
1	Public Administration	Municipality of Amsterdam department of sustainability and spatial planning	Nov 2021
2	Public Administration	Amsterdam city council policy advisor on physical matters	Dec 2021
3	Public Administration	Amsterdam city council policy advisor on social matters	Dec 2021
4	Public Administration	Amsterdam municipal health services	Nov 2021
5	Public Administration	Municipality of Amsterdam department of health	Dec 2021
6	Public Administration	Municipality of Amsterdam innovation team	Jan 2022
7	Private Sector	Partnership of healthcare providers, insurers and the municipality	Dec 2021
8	Academia	Amsterdam University of Applied Sciences project leader Covid project	Aug 2021
9	Academia	Amsterdam University of Applied Sciences design department	Dec 2022

2 Characteristics of the case study area

Amsterdam is the capital and largest city of the Netherlands, located in the province of Noord-Holland and part of the conurbation commonly called the Randstad (Amsterdam, Rotterdam, The Hague and Utrecht). In addition, the Metropolitan Region Amsterdam (MRA), a voluntary partnership of municipalities (MRA, 2022), has been functioning for over a decade (see Map 1). The core city has a population of almost 900,000 inhabitants and the metropolitan region about one and a half million. It is widely considered a compact city and most of the country's highest-density neighbourhoods are located in Amsterdam (Natuur & Milieu, 2022).

Map 1 The 31 municipalities of the Metropolitan Region Amsterdam



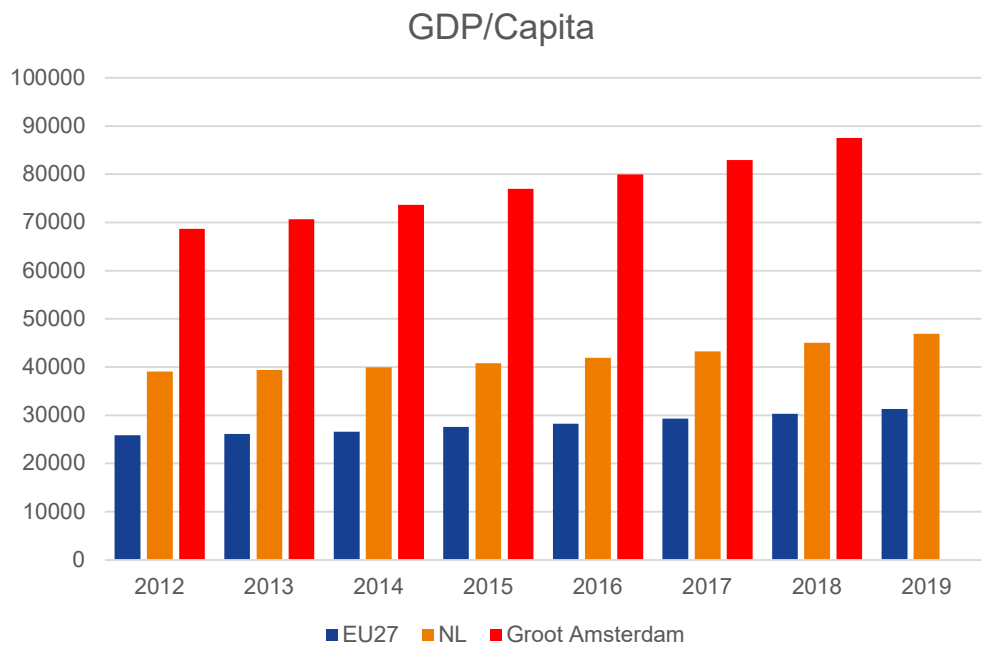
Regional level: NUTS mixed levels (LAU & NUTS 2-3) / Data version : 2021
Source: Territorial impacts of COVID-19
Origin of data: MRA

2.1 Economic characteristics

The Netherlands is traditionally a mercantile nation and has now developed into an advanced services economy. At the same time, and largely due to its location, it has a significant agricultural function (it is the second-largest exporter of produce in the world), industrial activities connected to the Port of Rotterdam (largest in Europe), and logistics sector. More recently, it is profiling itself as a global internet hub.

In terms of GDP/capita the Netherlands is significantly above the European average, and the Amsterdam region (no LAU GDP data is available) is significantly above the national average. The same holds for the rate of growth: Amsterdam is running further ahead of the Netherlands and the EU-average. Half of the people living in Amsterdam work outside of the city, and half of the city's jobs are filled by people living elsewhere (Gemeente Amsterdam, 2020a, p. 54). Given that the proportion of jobs is higher in the core city than the region, some of the city's higher GDP/capita is due to people commuting inwards. Over the past decade, the vast majority of regional job growth occurred within the city of Amsterdam (Gemeente Amsterdam, 2021h, p. 43).

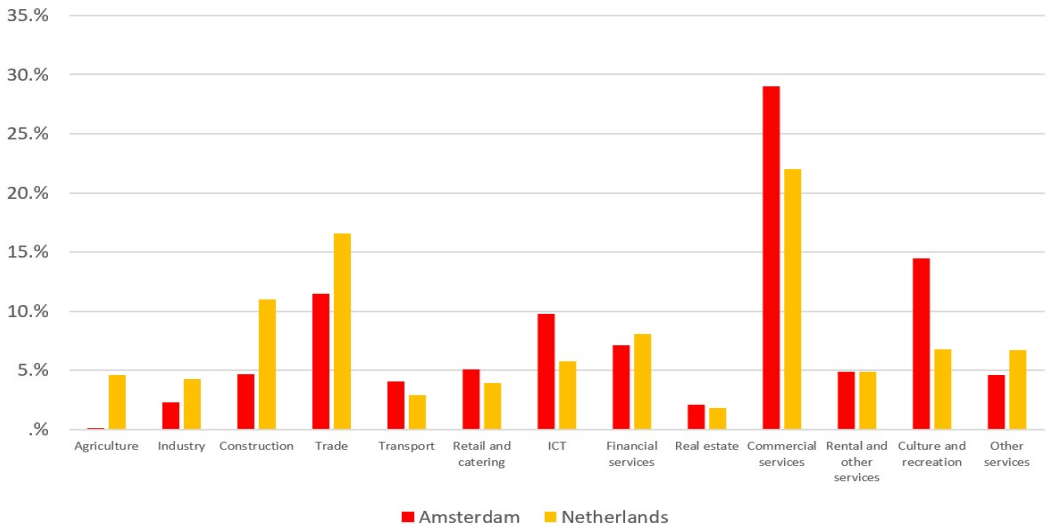
Figure 2 GDP/capita in the Amsterdam region, the Netherlands and the EU



Source: CBS and Eurostat, own calculations

The structure of Amsterdam's economy is distinct from that of the rest of the country. Unsurprisingly, the share of businesses in the primary and secondary sector are underrepresented (the first virtually non-existent); the same is true for the construction and trade sectors. On the other hand, Amsterdam is highly specialized in ICT, commercial services and culture and recreation and to a lesser extent in retail/catering and transport. As such, a similar picture emerges as with the GDP comparison: the Netherlands is an advanced services economy with respect to the European average, and Amsterdam is that with respect to the national average.

Figure 3 Sector structure in Amsterdam and the Netherlands in 2019



Source: CBS, own calculations

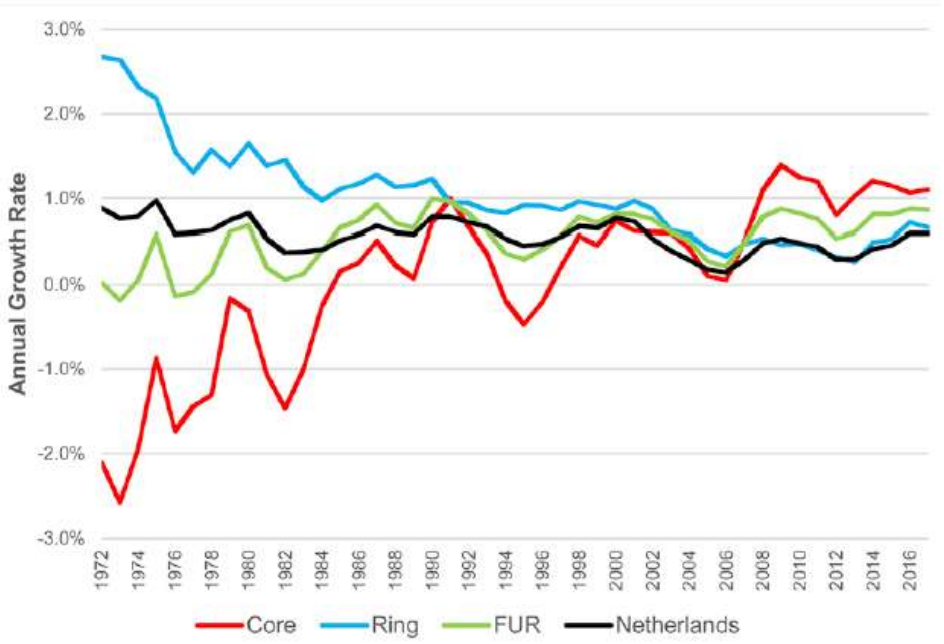
Since the turn of the 21st century, Amsterdam has focussed further on the knowledge and service economy. The city has a reputation for embracing innovation: it considers itself an 'early adopter' due to its character of being a liberal, activistic and social community (Gemeente Amsterdam, 2021h, p. 43). It is also a main knowledge hub in the country and internationally, with two high-ranking universities – The University of Amsterdam and the Free University – being located there. This also makes it the nation's largest student city. It is located at a major Internet hub, which in recent years has attracted interest not only of international IT companies, but their data centres as well. Although the economy can largely be seen as thriving, the specialization and openness can make it vulnerable to global fluctuations and shocks. In its spatial strategy, the municipality argued that it should diversify its economy (Gemeente Amsterdam, 2021h, p. 45).

2.2 Social characteristics

Amsterdam is experiencing a structural rebound in jobs and population. This phenomenon can be observed in other major Dutch cities and elsewhere in Europe (Dembski et al., 2019), but it is most pronounced in Amsterdam. Like the Netherlands as a whole, Amsterdam has a longstanding tradition of being an open, tolerant and 'just' city (Fainstein, 2010). And like the Netherlands as a whole, this image has been undergoing revision (Werfhorst and Hest, 2019). Structural, often global, trends and developments indicate a movement of the capital city into the European mainstream. At present, inequality in Amsterdam is greater than the Dutch average, and affordable housing has become the most pressing social issue.

Looking closer at the locus of population growth in the burgeoning region, it is the edges of towns, particularly the southern edge of Amsterdam, where the greatest growth is visible. This is not surprising given the contiguous urban development of the city and the peripheral location of the airport. The composition of population development in Amsterdam diverges greatly from the national average: continuous domestic outmigration offset by continuous foreign immigration.

Figure 4 Population growth in urban cores, ring and functional urban regions (1972-2018)



Source: Dembski *et al.* (2019, p. 35)

Map 2 Population growth in Amsterdam (2011-2018)

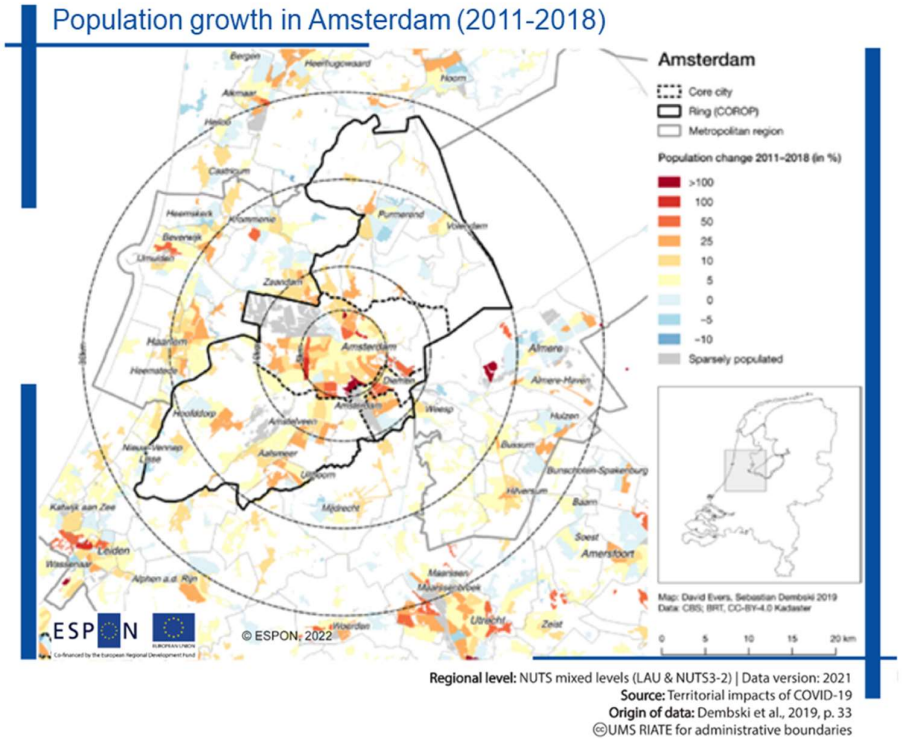
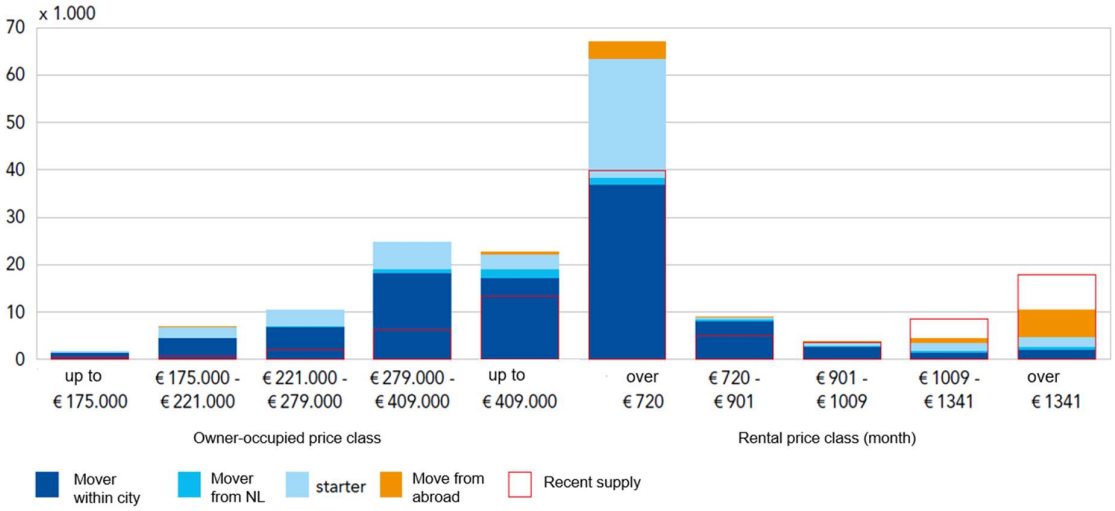


Figure 5 housing supply and demand in Greater Amsterdam in 2019



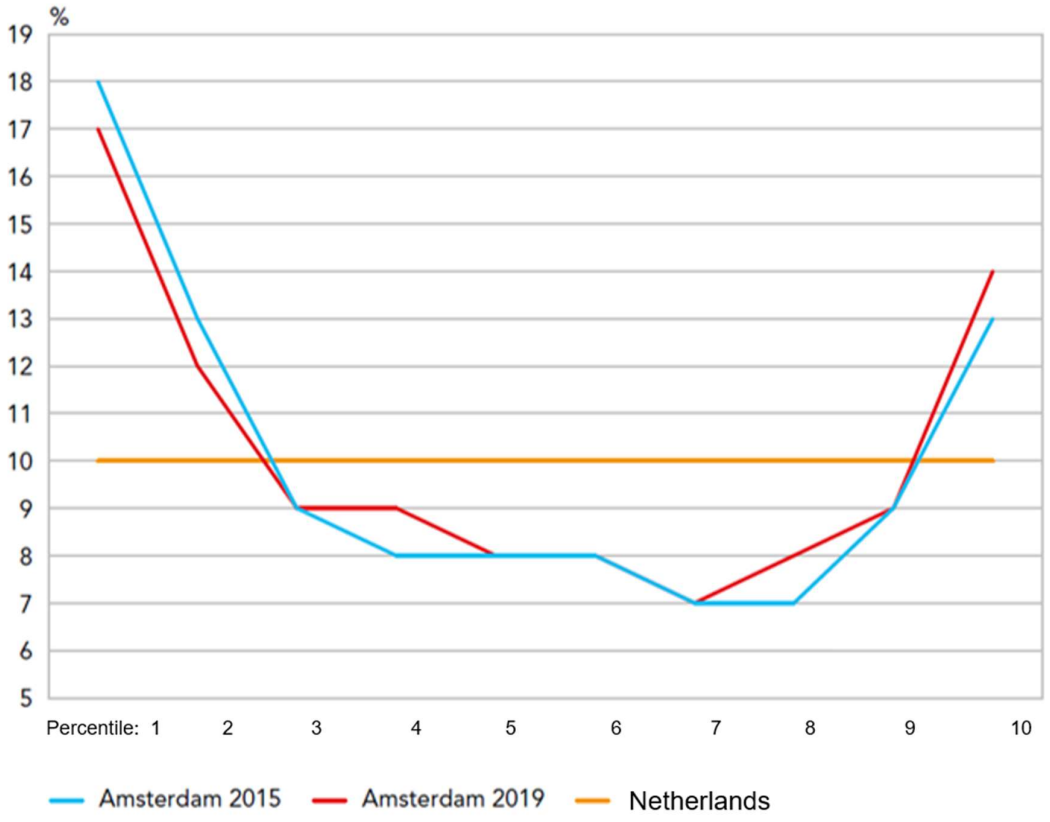
Source: Gemeente Amsterdam (2021c, p. 29)

The recent growth of the core city and the wider metropolitan area has placed a major strain on housing supply. Affordable housing has become one of the most pressing political issues in the Netherlands, and in Amsterdam in particular. Many Amsterdam residents feel their home is too small, especially single parents with three or more children (Gemeente Amsterdam, 2021c, p. 31). More importantly, those seeking housing – especially first-time buyers – are often priced-out of the city, while waiting lists for social housing in Amsterdam is currently over 13 years and even higher in many of its suburbs (Kraniotis and De Jong, 2021). The greatest quantitative demand

(see figure below) is for affordable housing, and this is also where the greatest quantitative shortage is. Interestingly, the rental properties recently put on the market are predominantly in the most expensive price class and, when rented, are predominantly occupied by foreigners (expats). Unlike rental units, there is an undersupply of owner-occupied housing in all price classes. All in all, there seems to be a real housing shortage in all segments except for luxury rental accommodation.

Inequalities in the housing market are replicated in other areas as well. Amsterdam has a more highly educated population than the rest of the country (49% versus 32% nationwide), and this is even more pronounced in the workforce (59% versus 37% nationwide). At the same time, it also has a disproportionate share of low-skilled labour (36% versus 20% nationwide) and higher unemployment among lower and medium-educated people (Gemeente Amsterdam, 2020a, p. 56). When the income distribution of Amsterdam's population is compared to the national average (see Figure 6), the difference between rich and poor becomes starker. Social inequality is therefore a hotly debated topic. The share of millionaires has doubled in the past five years and extravagant apartments with eye-catching architecture and luxury sportscars are becoming more common (Herter, 2021), while the share of social housing has steadily declined.

Figure 6 Income distribution of Amsterdam households with respect to the Dutch average



Source: Gemeente Amsterdam (2021c) p. 134

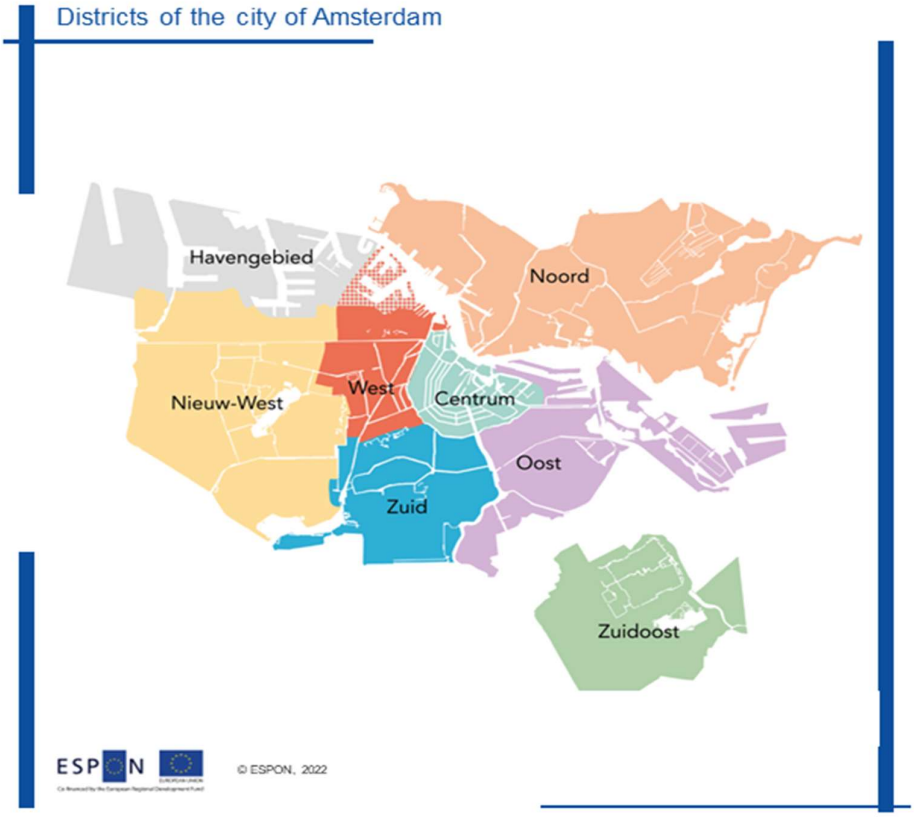
Health inequality is strongly linked to social inequality: on average, people in the Netherlands with a lower social standing (usually measured by attained educational level so as to control for gender and employment status) live 6-7 years less and enjoy 15 fewer years in good health than their higher-educated counterparts. The evidence suggests that this gap is increasing (Stronks *et al.*, 2019). In addition, the poorest neighbourhoods were found to possess attributes unconducive to a healthy lifestyle (Van Velze *et al.*, 2020). In Amsterdam, given its socioeconomic segregation, disparities in health can be readily observed in differences between districts: the share of obese 5 year-old children is 18% in the relatively poor Amsterdam Southeast but just 9% in the affluent Zuid quarter (Stronks *et al.*, 2019, p. 156). In this sense, unequal access in the housing market aggravates health segregation.

2.3 Governance characteristics

The Netherlands has a three-tier state structure (national, provincial, municipal) and is usually described as a 'decentralized unitary state' (Toonen, 1987) due to its hybrid division of powers. Territorially, Amsterdam has the odd position of being a capital city where national government is based elsewhere (The Hague). This historical artifact has affected its development culturally, economically and politically. Fiscally, for example, the country is highly centralized, which has been a long-standing source of contention as revenue is generated locally but distributed nationally. In 2019 half of the municipality's income came from the national government, a third of which is specifically earmarked. Unlike the national government, municipalities in the Netherlands are not allowed to run a deficit and must submit balanced budgets (Van der Veer and Panneman, 2021). The main sources of local revenue are parking fees, property tax, waste tax, and tourist tax. Active municipal participation in urban development provides an important source of extra income (Gemeente Amsterdam, 2018). Most of these local income sources are crisis prone, which can be seen as a potential financial vulnerability.

In 2015, many social policies (and their related costs) were decentralized, and this became a major municipal task (Gemeente Amsterdam, 2015). The main expenditures of the 2019 (€ 5.5b) budget reflect this: employment and healthcare topped the list (Gemeente Amsterdam, 2018). For 2020, the city raised its ambitions – and spending levels (€ 6.3b) – on healthcare and social services as well as renewal of various neighbourhood centres (Gemeente Amsterdam, 2019). National cutbacks in the general municipal fund meant that the municipality had to dig deeper into its own reserves. Still, the structural balance of the municipality (income plus assets vs debts and costs) is considered healthy (Gemeente Amsterdam, 2019, p. 25).

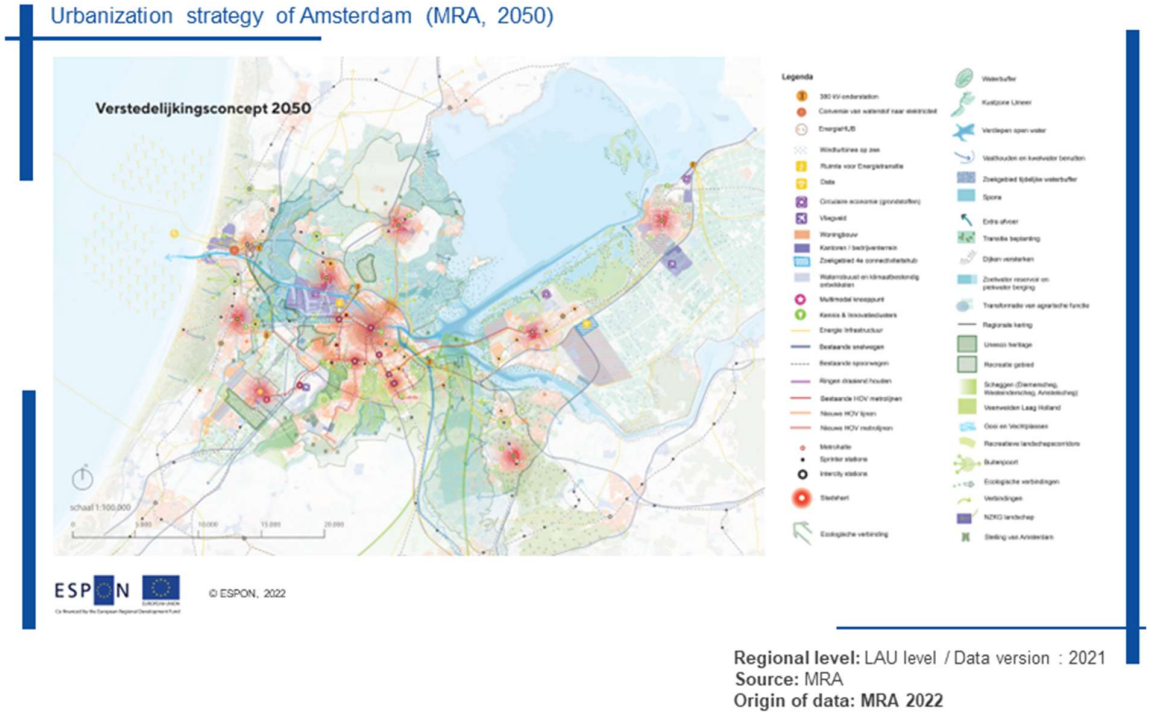
Map 3 Amsterdam city districts



Regional level: LAU level / Data version : 2021
Source: Gemeente Amsterdam
Origin of data: No data

Amsterdam is clearly the epicentre of the metropolitan area. Most of its surrounding communities are closely tied to it economically and socially, if not physically. Amsterdam is located within the province of Noord-Holland which has official decision-making powers over it, but in practice Amsterdam has enjoyed relative autonomy due to its size and importance. Municipal coordination has taken place since the 1990s, and there is a long history of unsuccessful attempts to create a metropolitan government, culminating in a humiliating referendum defeat of a 'city province' in the mid-1990s (Bovenberg and Korthals Altes, 1994; Toonen, 1998). In the 1990s, the city was divided into a number of urban districts, whose borders have shifted over time. These are run by elected officials and have been delegated various municipal tasks, notably spatial planning. Currently, intermunicipal coordination occurs under the name MRA (Metropolitan Region Amsterdam). The MRA is voluntary, not directly elected and has no official status (and therefore no statutory planning powers) within the state structure. Over time, it has succeeded in addressing a number of pressing spatial problems such as oversupply of office space and has recently produced a comprehensive urbanization strategy (see Map 4).

Map 4 MRA 2050 urbanization strategy



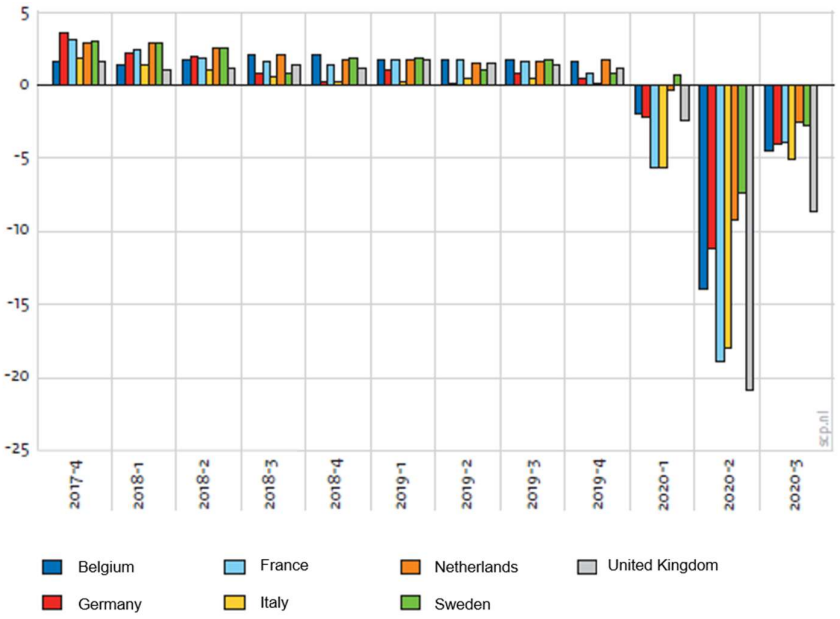
2.4 Impacts of COVID-19 on the region

2.4.1 Economic impacts

Amsterdam's economy was affected differently than the rest of the Netherlands due to its unique sector structure. The tourist industry, a major driver of the economy, slowed to a standstill during the first wave and has yet to fully recover. With it, dependent businesses such as restaurants, bars, hotels and retail suffered disproportionally. There is a clear geographical distribution of impacts within Amsterdam, with the city centre being by far the most affected in the short term. Because revenue losses are compensated by generous national relief measures (see Section 4.1), commercial vacancies have not risen as much as expected. By Autumn 2021, the economy was showing signs of recovery, but new restrictions were announced as the Omicrom Covid-19 variant was discovered. Therefore, given the great uncertainty surrounding the fluctuations of the pandemic and related policy responses, estimations on the medium-term impacts should be approached with caution. Nevertheless, it is expected that in the long term, given its significant territorial capital, Amsterdam will be resilient enough to reinvent itself if need be.

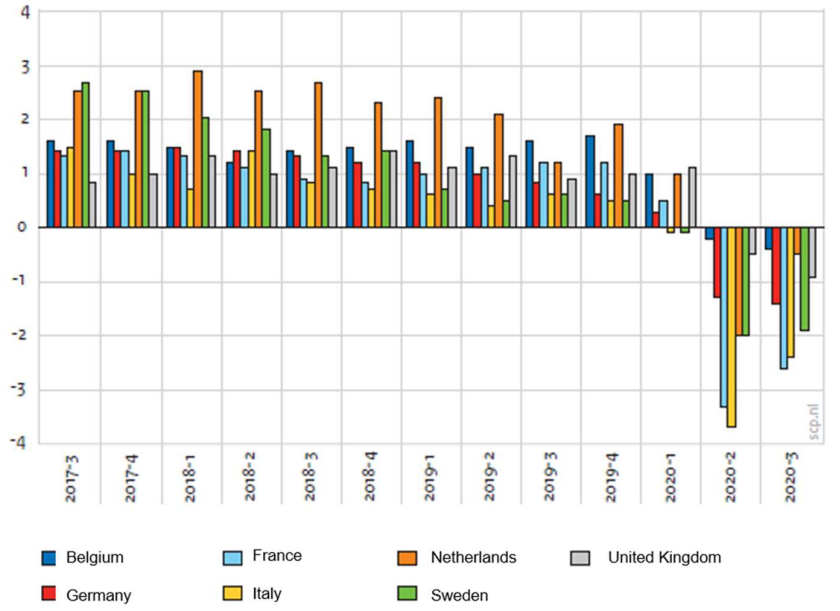
When considering impacts of the pandemic, it is useful to put the Dutch case into an international perspective. The crisis had severe immediate impacts on the economy in terms of GDP (Figure 7) and employment (Figure 8). With respect to similar countries in Europe, the Netherlands occupies a middle position. Interestingly, in Italy and France, the decline in GDP translated itself into much more unemployment than in the UK and Belgium.

Figure 7 GDP development in selected European countries (2017-2020)



Source: De Klerk (2021, p. 47)

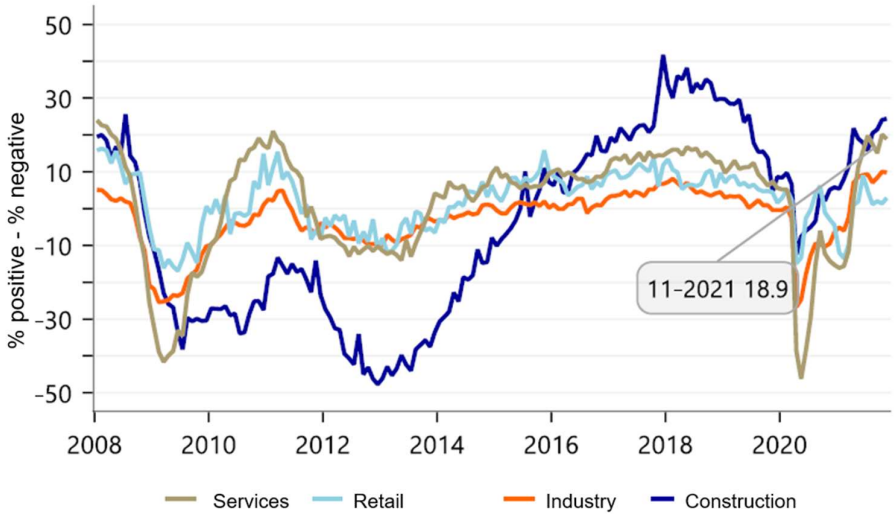
Figure 8 Employment development in selected European countries (2017-2020)



Source: De Klerk (2021, p. 47)

A major impact study by the Netherlands Institute for Social Research called *A Year with Covid-19* concluded that, "in terms of economic impact, the Netherlands fared well. Compared to the other countries we studied, the rise in unemployment and GDP loss was relatively minor by the third quarter of 2020" (De Klerk, 2021).

Figure 9 Confidence per sector

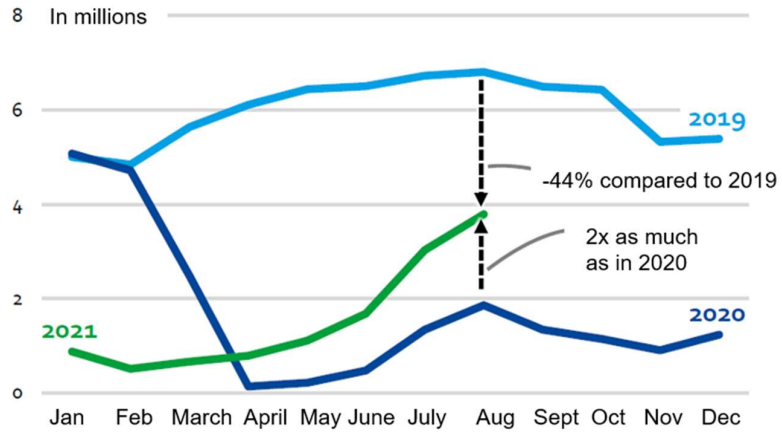


Source: Van der Ven (2021, p. 4)

Some economic sectors are more sensitive to external shocks than others. Based on national data since the 2008 crisis, industry follows the general economic trend and is slightly less sensitive to short-term fluctuations than services. The construction sector, on the other hand, was slow to recover, but when it did, surpassed the confidence levels of the other sectors. As far as Covid-19 is concerned, services, industry and retail have been impacted far more than construction (which is slow to change due to pipeline plans and long planning processes). The most affected sector is retail.

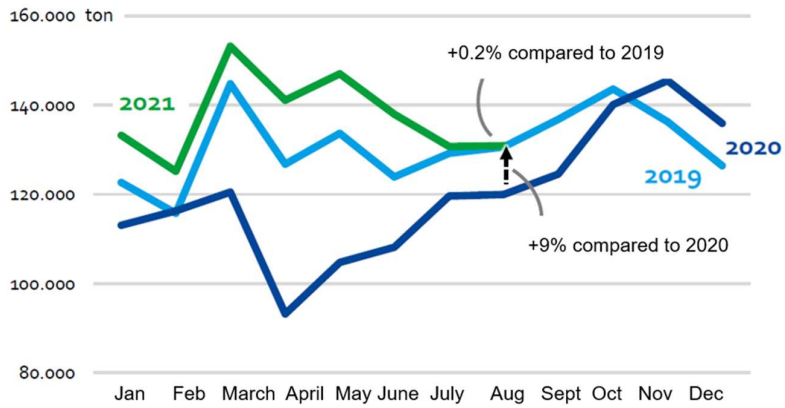
Zooming in, the statistical office of Amsterdam publishes regular updates on economic development in the city which can be read in bimonthly reports or accessed directly using an interactive online tool. According to this dashboard tool, all indicators were either in the red (underperformance and worsening) or orange (decline) categories. By October 2021, many had moved into the green (above average performance and growing) or yellow (recovering) categories. Among the lagging indicators are housing sales, but still these remained slightly above the trend. Hotel stays and passengers at Schiphol Airport remained at or below average, signalling a significant recovery even with respect to a few months ago (O&S Amsterdam, 2021). One of the most recent economic reports (September 2021) noted that the 1.5 meter social distancing rule was being revoked, allowing the city's services sector to return to normal operating capacity (Gemeente Amsterdam, 2021e). Nationally, in the second quarter a growth, as a whole, was recorded faster than expected, up 3.8% from the previous period. Unfortunately, no recent GDP data is available at a subnational level. Still, in Amsterdam, the number of bankruptcies in 2021 was half that of the preceding year, reaching a record low; the national support measures are seen as a direct cause of softening the blow with the side effect of protecting businesses that would normally fail (see Section 4.1). The National Economic Institute (CPB) criticized the generous and undifferentiated national support measures on this count. Since less-adaptive companies were saved from collapse, the CPB argued, this prevented the normal flow of workers to healthy, growing sectors (Adema *et al.*, 2020).

Figure 10 Number of passengers at Schiphol Airport (2019-2021)



Source: O&S Amsterdam (2021)

Figure 11 Freight volume at Schiphol Airport (2019-2021)

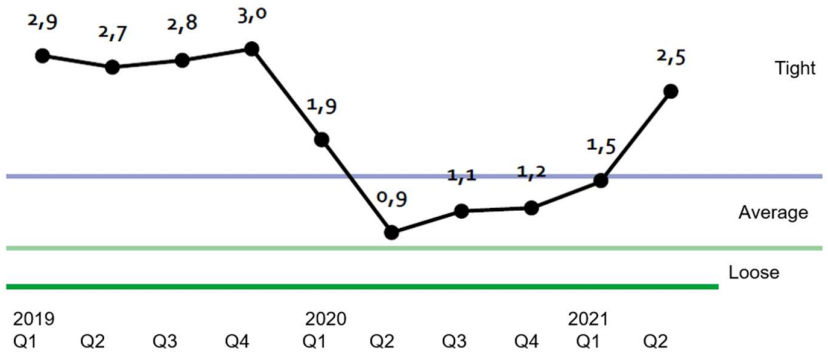


Source: O&S Amsterdam (2021)

With respect to a year earlier (August 2020) job vacancies have almost doubled in Greater Amsterdam, and particularly tech companies are finding it difficult to find qualified personnel. The labour shortage had yet to reach pre-pandemic levels. A relevant indicator for vitality is foot traffic level in the main shopping street, the Kalverstraat. This shows major fluctuations coinciding with the lockdowns. Levels in 2021 show growth with respect to the previous year but have yet to attain pre-Covid-19 levels. A study on the impact of Covid-19 on city centres predicted that the larger, more vital cores, Amsterdam in particular, would be more affected by the crisis than smaller ones because they were more oriented towards non-essential goods and tourists. In fact, shop vacancy levels in Amsterdam's city centre were predicted to triple by 2022, bringing it up to about the national average (Evers *et al.*, 2020).[1] It should be noted that given the high uncertainty about the pandemic, scenarios for the medium term are widely divergent (from complete recovery to -9% GDP) (BCG, 2021).

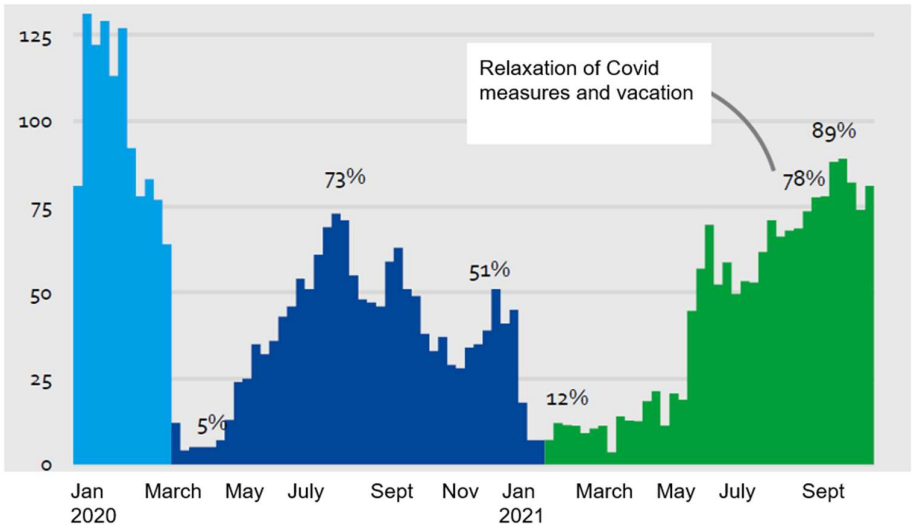
[1] An update of this report in 2022 found, however, that the continuation of the economic measures beyond expectations and continued transformation of shop space into other uses contributed to a fall in retail vacancy rates in city centres (Evers, 2022).

Figure 12 Labour market development (ratio job-vacancies / job-seekers)



Source: O&S Amsterdam (2021)

Figure 13 Footfall on the Kalverstraat with respect to same week in 2019



Source: O&S Amsterdam (2021)

A final economic aspect is public finance. As stated, the Netherlands is highly centralized fiscally. Municipalities have limited income sources, most notably from property tax and land development, and are obliged to maintain a balanced budget as part of the Dutch implementation of the European Monetary Union rules (Allers and Van Nijendaal, 2012). In Amsterdam, the first post-Covid-19 budget rose significantly to €6.9b, the highest in the city's history, and there is a clear shift occurring between national and local income; whereas in previous years this was almost 50/50, national funds have declined to less than a third of the budget. At the same time, revenues from tourist tax and parking fees were much lower as a result from the pandemic, some of which was partly offset by the national government. The pandemic also placed extra strain on the financing of social policy. On the other hand, the pace of urban development has hardly been affected (Van der Veer and Panneman, 2021; Vermeulen, 2021). The gap between increased municipal investment and declining revenue was closed by cutbacks at city hall, a 20% increase in property tax and the use of the windfall income generated by selling off municipal land leases (Gemeente Amsterdam, 2020b). The budget for 2022 returned to pre-Covid-19 levels, relying once again on the national government for half of its income (Gemeente Amsterdam, 2021b). This is the last budget of the current municipal government, which argued that the policy line that had been set up in 2018 had not been affected

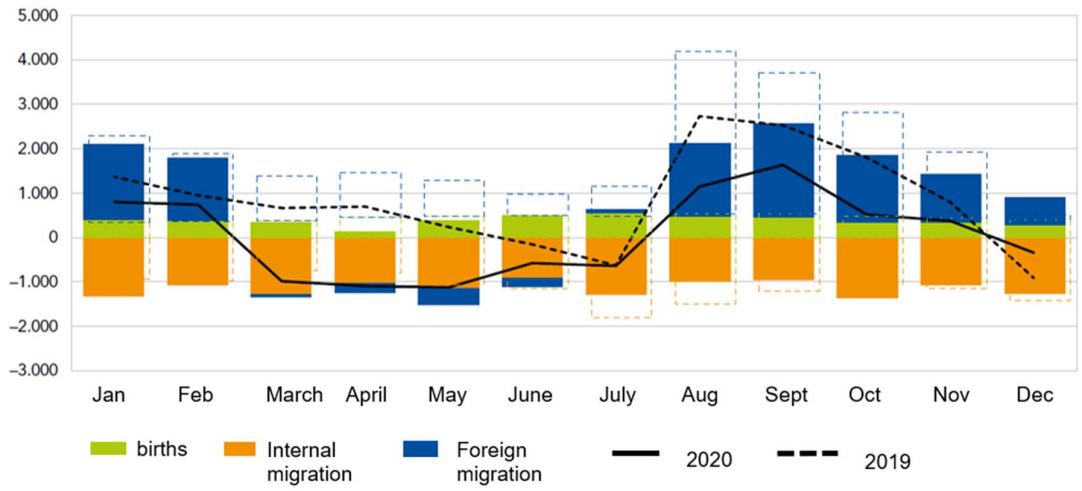
by the pandemic. If anything, "… it made us even more aware of the necessity of continuing the policies we were implementing to make the city more sustainable, cohesive and inclusive" (Gemeente Amsterdam, 2021b, p. 11).

2.4.2 Social impacts

As elsewhere, the pandemic and the restrictive measures to fight it had an immediate impact on the quality of life in the Netherlands, but with widely divergent repercussions depending on household composition, age, health, income level, educational status, employment situation and location. As with the economy, the situation in Amsterdam differs from the national average on several key indicators, which can usually be explained by the city's specific territorial attributes.

During the first wave, media attention centred on people planning to move to more rural locations from cities, particularly Amsterdam, which had gained a reputation of being overpriced and cramped. The desolateness of the city caused by lockdowns and absence of expats and tourists bolstered the view that Amsterdam had passed its peak. Indeed, the population which had been growing steadily for a decade experienced its first decline. Looking closer at this development, however, it is evident that this dip was not caused by domestic outmigration, but by a sudden immigration stop during the first wave. The commentators were moreover proven wrong about the attractiveness of the city: housing prices and rents continue to rise in Amsterdam (Gadet and Vermeulen, 2021; Vermeulen, 2021). As a result, having sufficient housing for healthcare professionals during the covid pandemic became a political issue (Van der Veer and Panneman, 2021).

Figure 14 Monthly population development in Amsterdam in 2020 (2019 in dashed lines)



Source: Gemeente Amsterdam (2021c, p. 24)

2.4.2.1 Psychological well-being

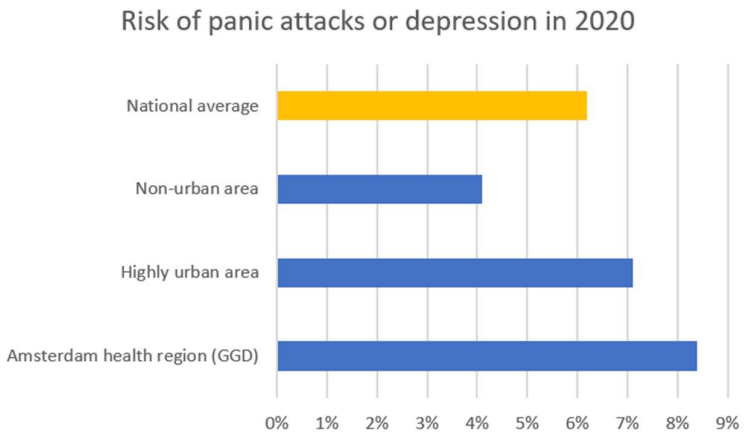
The Netherlands ranks among the happiest countries in the world according to the *World Happiness Report*, coming in sixth pre-Covid-19 and rising to the fifth position in 2020 (Helliwell *et al.*, 2021). This was confirmed by a study by the national institute for social research (SCP) which argued that, as of November 2020, the social impact of Covid-19 was moderate (de Klerk *et al.*, 2021). Another study using largely the same data arrived at the opposite conclusion: that the impact of Covid-19 on mental health was considerable (Snel *et al.*, 2021). Where one chooses to draw the line is of course partly a matter of perspective.

One thing is clear: the pandemic affected social groups quite differently. On average, the elderly were more prone to feelings of loneliness while young adults were more likely to feel psychological distress, particularly students (de

Klerk *et al.*, 2021, p. 70; Snel *et al.*, 2021). The rate of sexual abuse of young people was also higher during the curfews in the beginning of 2021 (*Het Parool*, 2021). A distinct social stratification of happiness is observable: rising with the level of attained education and falling with age. The psychological impacts of Covid-19 reinforced this: households labelled as 'most vulnerable' saw the greatest decline in satisfaction (except for families already plagued by domestic violence and child abuse, which most likely already had an extremely low satisfaction rate) (Steketee, de Wildt and Compagner, 2020).

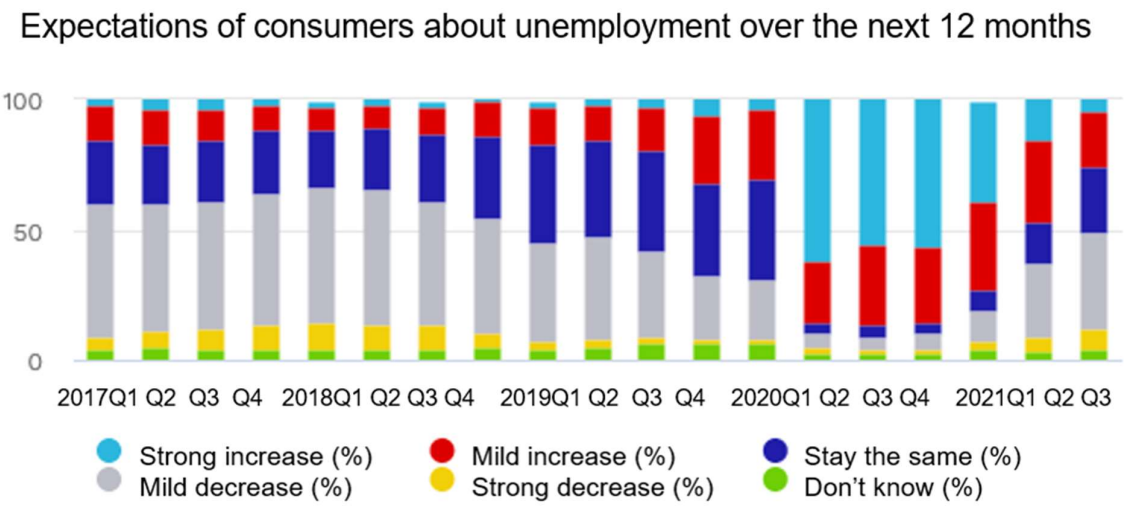
Amsterdam fared comparatively worse than elsewhere in this regard: whereas 6.2% of the Dutch population were prone to depression or panic attacks (in autumn 2020), and only 4.1% in rural areas, this share was significantly higher in urban areas (7.1%) and in Amsterdam in particular (8.4%) (Meester, 2021). In a survey by the municipality, it was found that those reporting they were 'happy' or 'very happy' had dropped from 75% in 2018 to 70% in 2020. Men tended to be more affected than women and low-educated people (already the least happy before) suffered the largest decline (53% in 2020) whereas highly-educated dropped only two percentage points to 81% in 2020 (Gemeente Amsterdam, 2021c, p. 45).

Figure 15 Risk of panic attacks or depression



Source: Coronamonitor ArbeidsmarktInZicht (2021)

Figure 16 Fear of becoming unemployed



The national consumer confidence index provides additional insight into how individuals view their livelihood and short-term prospects. In Amsterdam, after being stable for a couple years, consumer confidence fell to zero just prior to the pandemic. Afterwards, it became negative, reaching its nadir in the second half of 2020. Since then, it has risen to almost pre-Covid-19 levels. Similarly, before the pandemic, very few predicted a 'strong increase' of unemployment, but during the first wave almost half did. This pessimism has slowly dissipated since, reaching pre-Covid-19 levels by Q3 of 2021. Like the happiness index, the most vulnerable groups reported the least confidence (Meester, 2021).

The same relationship was found in Amsterdam. In 2018, 77% of respondents reported being confident about the future, declining to 71% in 2020. Unlike happiness, no difference between genders was discernible, but other disparities did emerge: young people saw a sharp decline -18% as well as low-educated (-11%) residents and those with poor health (-11%) (Gemeente Amsterdam, 2021c, p. 46). Again, some groups were largely unaffected, such as the elderly (this actually increased 3%), highly-educated and healthy people.

2.4.2.2 Unemployment

Consumer expectations mirrored actual developments. Unemployment, measured by the number of people receiving unemployment benefits, fell to almost pre-pandemic levels in Amsterdam. The same is true for welfare: after a sharp rise in benefit claims in the first half of 2020, as of August 2021 this also declined to pre-pandemic levels. As a result of the expected job growth in the medium term, the municipality expects that – despite increased possibilities for teleworking and given the continued low vacancy levels – demand for office space will rise (Gemeente Amsterdam, 2021h, p. 182).

Figure 17 Unemployment benefit claims

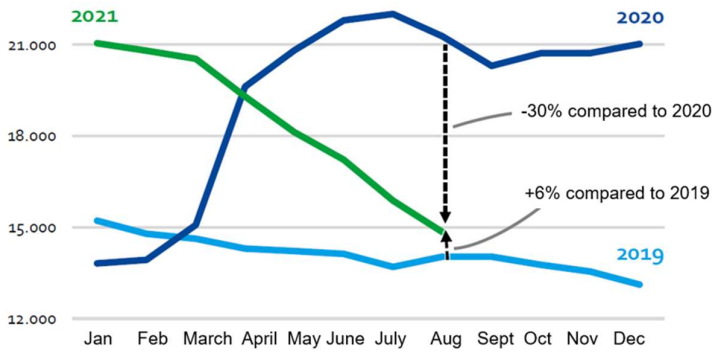
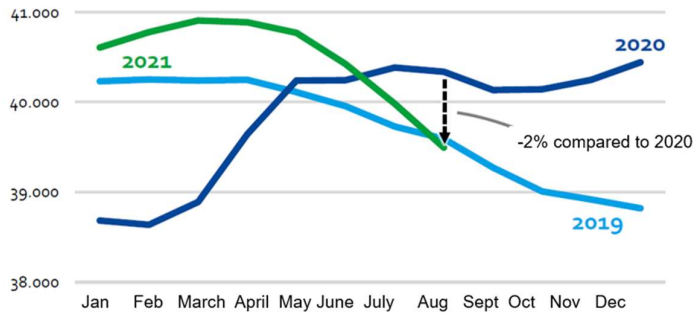
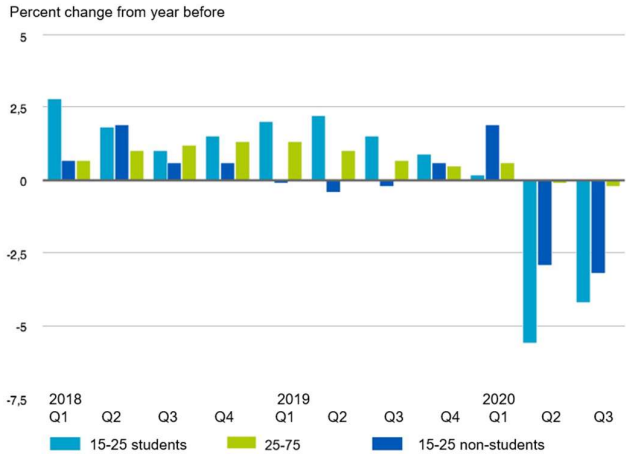


Figure 18 Welfare benefit claims

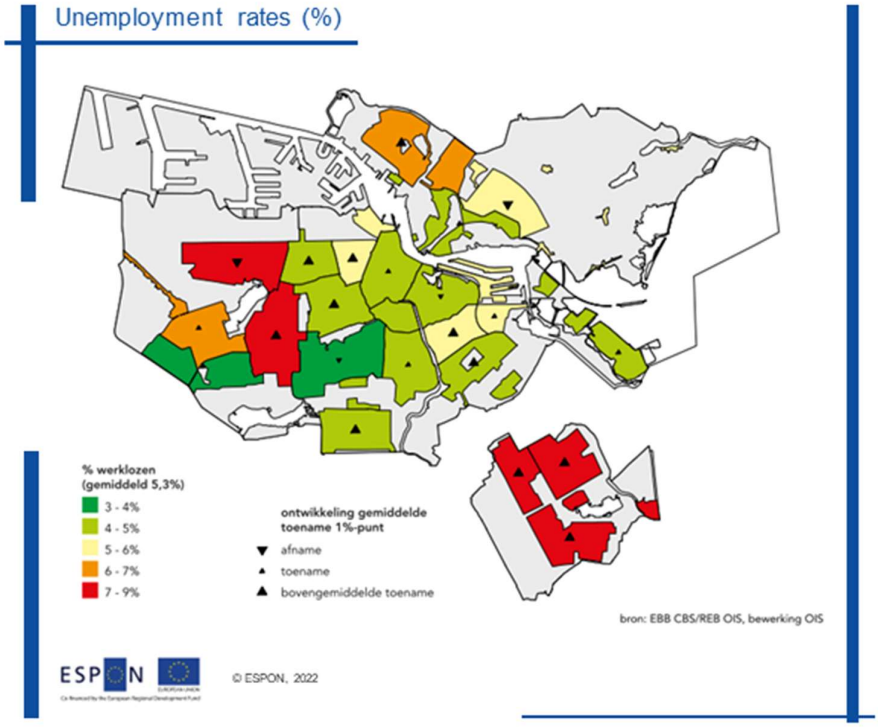


As with the other quality-of-life issues, the distribution of employment impacts was asymmetrical and tended to exacerbate existing inequalities. Nationally, net job loss could almost entirely be attributed to young people, especially students. Unemployment claims were predominantly filed by people under 27 working under flexible contracts, on-call contracts and for temp agencies (SER, 2020, p. 29). This group also saw the largest increase in welfare claims (26% in Amsterdam, as opposed to 48% in Rotterdam and 14% in The Hague). In the medium term, the share of families struggling with debts is expected to rise between 1% and 71% showing the enormous uncertainty surrounding household finance (BCG, 2021).

Figure 19 Change in employment by age group



Map 5 Change in employment by Amsterdam district

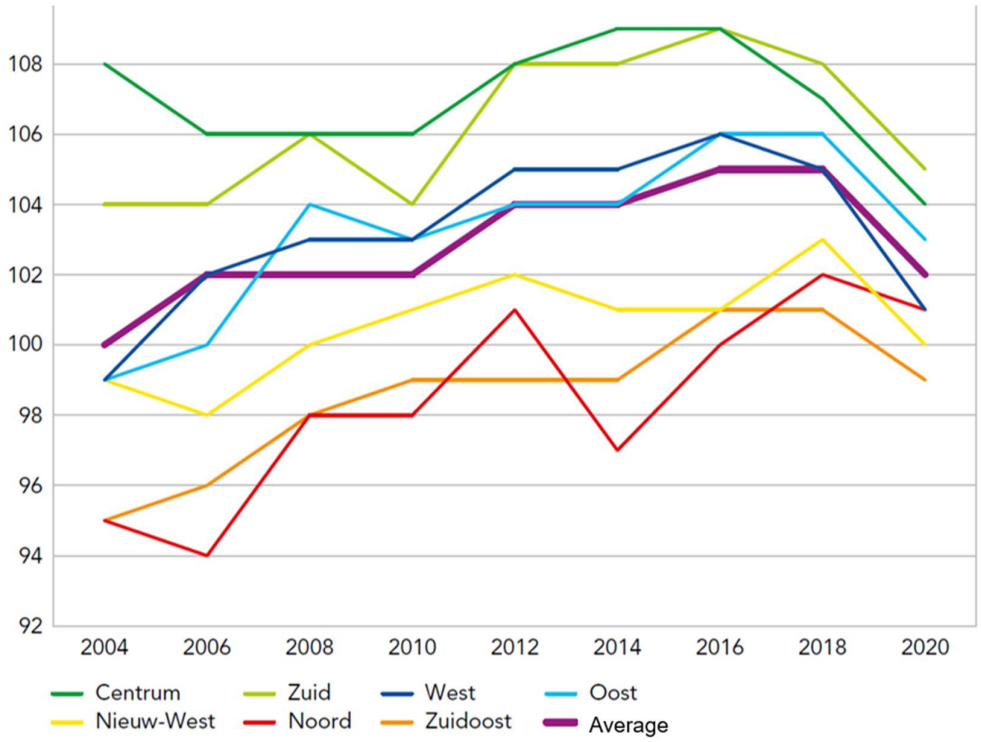


Regional level: LAU level / Data version : 2021
Source: Gemeente Amsterdam, 2021c, p. 127
Origin of data: EBB CBS/REB OIS

2.4.2.3 Poverty and disadvantage

As a relatively wealthy city within a relatively wealthy nation, the problem of poverty in Amsterdam is not as acute as in many European cities. Still, the gap between the wealthiest and poorest residents is wider than the rest of the country and growing (see Section 2.2), and the immediate result of Covid-19 was to further increase disparities. For example, as a result of school closures, children from low-educated households fell 50% more behind in their schoolwork and it is expected that this will continue into the medium term (BCG, 2021). Geographically, the pandemic has not increased disparities between districts with respect to perceived quality of life (an index measured by various survey questions about one's living situation). If anything, it seems to have a levelling effect, albeit at a lower level of quality overall. The affluent districts Centrum and Zuid fell sharply, whereas this was less perceptible in poorer neighbourhoods such as Zuidoost, Nieuw-West and Noord.

Figure 20 Perceived quality of life by Amsterdam city district (index 2004)

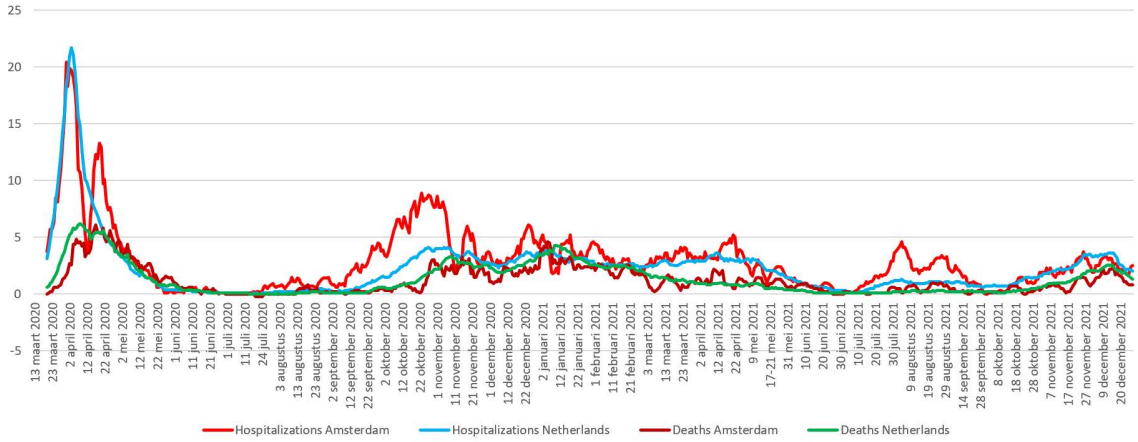


Source: Gemeente Amsterdam (2021c, p. 44)

2.4.2.4 Health and infection

The national social institute SCP reported that, "all in all, the Netherlands seems to fare rather well on a number of public health indicators with respect to other European countries: there are relatively few Covid-19 hospitalizations and mortalities compared to the other European countries we looked at" (De Klerk, 2021). That being said, there are clear differences between societal groups and Amsterdam is often a special case within the country.

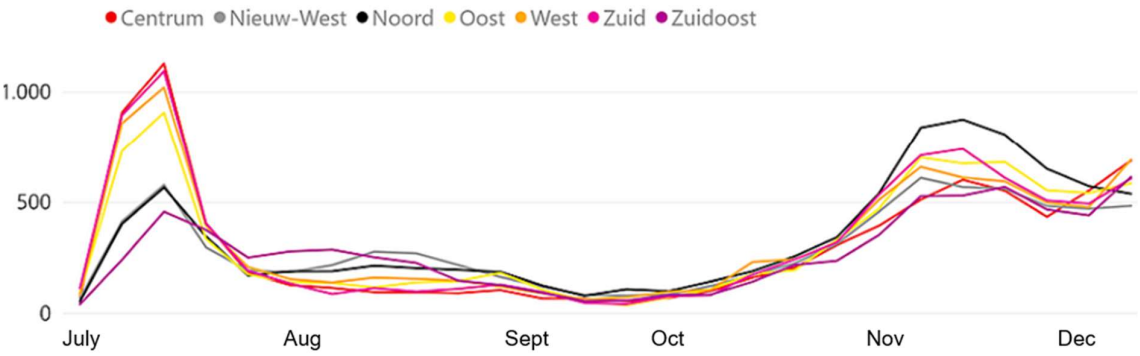
Figure 21 Weekly change in Covid-19 hospitalization and mortalities (3/2020-12/2021)



Source: Jive (2021)

A strong word of caution is in order when considering local health impacts. The data is difficult to compare due to fluctuations over time and space (localized pandemic waves). For example, the second wave hit Amsterdam relatively earlier than the rest of the country, and it experienced a larger spike during the summer of 2021 after the national government opened nightclubs. Moreover, many countervailing variables exist which converge to determine infections, hospitalization and death rates. For example, with only 1,000 deaths attributed to Covid-19, Amsterdam has a death rate of 10.8/100,000 people, which is slightly under the 11.7/100,000 rate nationally (with 20,500 deaths). But what does this imply? On the one hand the city's population is relatively younger (lower death rate), but on the other hand there are more immigrants from poor countries (higher death rate). Moreover, only 77% was fully vaccinated in the fall of 2021 against 86% nationally. Finally, infection rates differ from one neighbourhood to the next, but are not consistently higher in those with a lower socioeconomic position.

Figure 22 Weekly Covid-19 cases per district (per 100,000 inhabitants) in second half of 2021



Source: GGD Amsterdam (2022)

Moreover, the health impact of Covid-19 goes beyond the sickness of the disease itself. Importantly, the pandemic caused delays in healthcare provision for people with other issues. The National Healthcare Authority estimates that Dutch hospitals and clinics will have to make up between 170 and 210 thousand medical specialist operations, or about 11-14% of the number of operations that normally take place in a year (NZA, 2021). According to the national public health institute (RIVM) due to the first wave about 23% of specialised treatments were not continued, resulting in an estimated loss of about 50,000 healthy life-years nationally (van Giessen *et al.*, 2020). Moreover,

the stress, loneliness, panic or depression caused by the pandemic (and associated restrictive measures) can undermine health. In this sense, Covid-19 could lead to increased long-term health problems (lower life expectancy or decline in healthy life years) beyond the immediate sickness.

As noted in the previous chapter, the distribution of existing health problems is uneven, and so too are the related impacts of Covid-19. In the affluent Zuid quarter, 7% of the residents suffer from serious psychological issues while the share is 12% in Zuidoost (GGD Amsterdam, 2021). Covid-19 mortality among those with lower incomes (in the last 20th percentile) was twice the national average, and one and a half times as much for immigrants from poor countries (CBS, 2021; Pharos, 2021). Explanations for this include unhealthy lifestyles, underlying chronic health conditions, work where human contact is unavoidable, delaying healthcare, poor housing and neighbourhood attributes, lower educational levels and accompanying knowledge or skills regarding health, more prone to fear and stress, no mastery of the Dutch language which would be an impediment to accessing adequate healthcare.

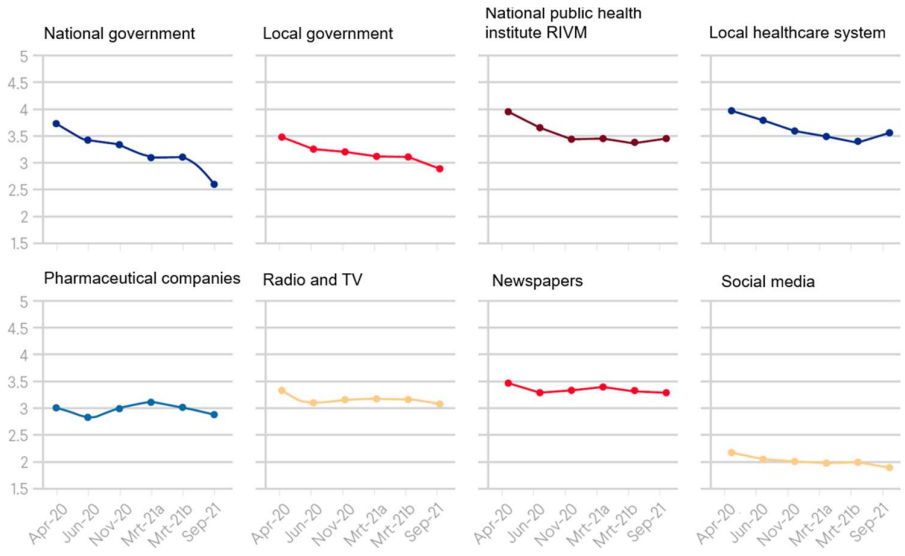
Another impact regards how the pandemic exacerbated structural problems in the healthcare system as a whole. Over the past decade, expenditure on healthcare increased rapidly, and without far-reaching reforms is expected to attain unsustainable levels (Broeders *et al.*, 2018). Until recently, this was primarily viewed as a budgetary problem, but the pandemic revealed that even with sufficient funds, there would still be insufficient capacity (e.g. trained medical personnel). As a result, there is a growing paradigm shift towards increasing supply, for example through better wages and benefits, and reducing demand by prevention and enhancing self-reliance (Van der Veen and Meijaard, 2021). The same is true for health inequality and lifestyle issues: these had been raised in various policy documents (e.g. municipal health policy, MRA urban development strategy, municipal spatial strategy and the masterplan for the Zuidoost district) but gained a new sense of urgency during the pandemic (Van der Veen and Meijaard, 2021). In addition, Amsterdam's healthcare organization (GGD) drew up a handbook together with the RIVM about how local health problems intensified by Covid-19 can be measured and tackled. In addition, the three-way partnership Sigra (municipality, healthcare providers and insurance companies) identified three steps: (1) accelerated digitalization of healthcare when possible (eHealth); (2) support to essential healthcare professionals (housing, parking, special transport like taxi services); (3) a paradigm shift from meeting demand to ensuring sufficient supply (quality and timing).

2.4.2.5 Socio-political trends

The pandemic has taken its toll on Dutch politics and society. The euphoria of schools, cafes and shops reopening fully in the spring of 2021 and plummeting infection levels in the summer following the vaccinations were soon dashed by a spike following the reopening of nightclubs and, as summer gave way to autumn, yet another wave and yet another variant. In general, the pandemic seems to have heightened socio-political polarization over the course of 2021. This occurred against the backdrop of a caretaker government that has failed to form a ruling coalition in a timely manner and which governs by pragmatism (Segers, 2021). An uninspiring vaccination campaign and the introduction of a Covid-19 app to regulate access to public events fomented unrest. The vehemence of demonstrations, altercations on social media and refusal to comply with new restrictions (Engbersen *et al.*, 2020, p. 12) is uncharacteristic of a society generally known as having a high regard for experts and trust in government.

According to a survey in November 2020, trust in the national government, the RIVM (national health institute), GGD (municipal health agency) and municipality as well as 'people in general' dropped significantly. On the other hand, trust in family/friends and family doctors remained high (Engbersen *et al.*, 2020, p. 21), and the pandemic has not affected the willingness to give help to others if needed. The same tendency was found for Amsterdam (Engbersen *et al.*, 2020, p. 14).

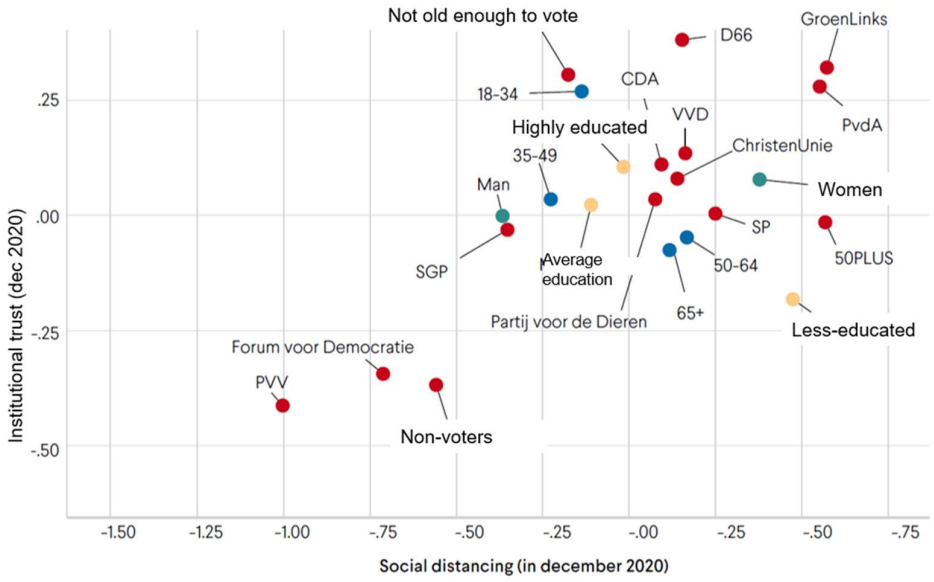
Figure 23 Change in trust in major institutions



Source: Krouwel *et al.* (2021, p. 7)

The politicization of Covid-19 measures can be read in various indicators. Among adults, dissatisfaction with the government increases steadily with age. Greater acceptance is found among women, natives and western migrants as well as those with a high education, good income, good health and steady employment (Engbersen *et al.*, 2020, p. 31). There is a clear relationship between trust and political party affiliation as well. Viewed another way, trust (and willingness to comply with measures and become vaccinated) is lowest among vulnerable groups (Krouwel *et al.*, 2021). The figure below positions various societal groups with respect to support for social distancing measures, with the anti-immigrant PVV and green party at opposite extremes.

Figure 24 Acceptance of social distancing measures by social group

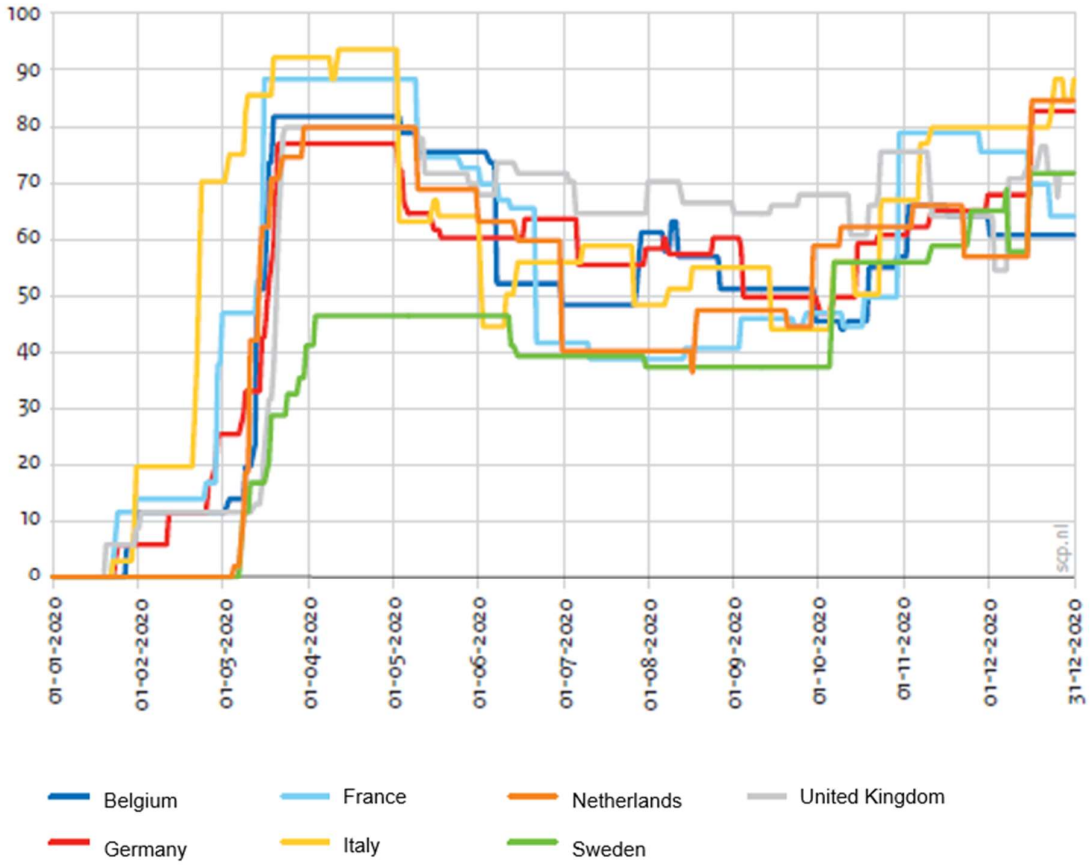


Source: Krouwel *et al.*(2021, p. 18)

3 Policy response to Covid-19

Comparisons are often drawn between member states as regards to the level of policy response. Using a composite index of measures (composed of eight indicators divided into three groups: containment e.g. school closures and travel bans, (2) economy (support to businesses) and (3) health such as testing capacity and mask requirements), the figure below shows that, in general, member states had roughly similar responses to the pandemic. Sweden was less active at the onset, but over time has gravitated to the European average. With respect to other member states, the Netherlands has been slightly less interventionist, but there were moments (e.g. second wave autumn 2020) where it was among the highest (De Klerk, 2021, p. 48).

Figure 25 Level of Covid policy intervention in 2020 in selected countries



Source: De Klerk (2021, p. 37)

With respect to the non health-related policies, by far the most important is the national generic support offered to businesses and self-employed to avoid economic collapse and, more specifically, unemployment. These emergency measures were introduced during the first wave and were planned to be discontinued in October 2021. However, successive waves caused many support schemes to be prolonged. For the entire 2020-2022 period, the total budgeted expenditure for measures against Covid-19 was estimated at € 81.7b (Algemene Rekenkamer, 2021a).

It is not easy to disentangle policies enacted to combat the effects of Covid-19 and policies and/or reforms already under consideration. This is particularly true for social policies. The Netherlands has a highly complex social system with numerous governance issues (e.g. multilevel, internal and external coordination and territorially) and frequent

changes, making it difficult if not impossible to pinpoint the difference between normal policy dynamics and specific pandemic responses. This difference becomes even less clear when considering whether a policy, such as new funds for cycle parking at a railway station, is being implemented as a genuine 'proactive' policy or whether it is just part of a wider pre-Covid strategy (e.g. on sustainable mobility) or whether the measure is just the result of a political shift in priorities (e.g. a local victory of a pro-environmental coalition). In the latter two instances, it is highly plausible that proponents of the policy will argue that they are proactively seizing opportunities posed by the pandemic, a claim that is extremely difficult to confirm or disprove.

3.1 Policy Context

Bearing in mind the caveats discussed above, this section will briefly discuss the degree to which Covid-19 (1) has presented a policy window of opportunity and (2) to what extent this window of opportunity has been seized by modifying existing policies or rethinking those under construction. The first question will be addressed by consulting documentation arguing that such a window exists. The second question, given the impossibility of establishing a causal link, will be answered primarily by interview data where practitioners were asked to reflect on this matter.

At the national level, the policy response has been overwhelmingly reactive in nature and sectoral rather than integrated (SCP, PBL, and CPB, 2021). This was contrary to what the national research institutes (*planbureaus*) had recommended at the onset of the pandemic: to be aware of the side-effects of policy and, when possible, to use the crisis to implement measures that would enhance future welfare. Instead, it is likely that the political urgency of providing a swift and strong response trumped broader, more long-term concerns.

Also in the recently published Spatial and Environmental Strategy of Amsterdam, the necessity of changing course as a result of Covid-19 was openly disputed (Gemeente Amsterdam, 2021h). The explanation given warrants an extensive citation because it articulates the municipality's philosophy about why specific Covid-19-related proactive measures are largely unnecessary:

> The fact that Amsterdam and other big cities are hit harder by the Covid-19 crisis provides cause to rethink the future of the city. At the same time, there is no reason to assume that structural trends will change. Our economy is becoming increasingly knowledge intensive, and the services sector is growing rapidly. Cities will continue to attract people. We moreover expect that the international tourism sector will continue developing given the persistent growth in Asia. We need to accept the fact that our city will grow and that the challenges posed by climate change and the energy transition are growing every year as well. At the same time, we need to remain vigilant about technological developments and digitalization and the impact it has on our economy and society (Gemeente Amsterdam, 2021h, p. 36, own translation).

Given that the timeframe for realizing the strategy is 2050 and the uncertainty surrounding Covid-19, the focus is on implementing robust measures for the expected structural changes, rather than fundamentally reassessing policies on the basis of what could be an isolated event. Even so, it is worth noting how little attention is given to how the implementation of such robust measures could be linked to the short-term crisis situation. A possible explanation could be that the strategy strives to rise above the momentary crisis in order not to seem outdated if this is resolved in the near future.

This presumption was largely confirmed in the interviews with Amsterdam officials. When asked about (proactive) policy, most referred us to existing strategies for the middle or long term (e.g. Environment and Planning vision, Health Strategy), remarking that Covid-19 simply underscored the urgency of these strategies. Naturally, some aspects were accelerated (e.g. improving public space) and others deprioritized (e.g. city marketing), but the general thrust barely changed as a result of Covid-19 (policy moreover shifted due to electoral results). Finally, there seems to be a real desire among municipal departments to "just get back to normal" which translates itself into not thinking about Covid-19 in a long-term way, but as a short-term problem to be tackled (Suurenbroek, 2021).

3.2 Proactive Policy Overview

3.2.1 Just transition policies

The vast majority of policies falling into the 'just transition' category, proactive or reactive, are set at the national level. In many cases, they are centrally administered as well. The vast majority of funds is directed to businesses rather than individuals in an attempt to absorb the socioeconomic impact of the pandemic and avert an economic crisis. Social policies can largely be seen as residual to this effort and are often more local.

Table 2 Just transition policies

Policy area(s)	Focus area(s)	Policy description	Target group(s)/ Beneficiaries	Responsible level of governance / Financing	Timing of policy	Duration
Just transition	Business support	The NOW scheme (*Noodmaatregel Overbrugging Werkgelegenheid*) compensates employers suffering at least 20% lost income due to Covid-19. The subsidy covers salaries of all employees with a fixed or temporary contract (UWV, 2020). The scheme is budgeted at €27b for the 2020-2022 period and is thereby the most significant national policy in terms of expenditure (Algemene Rekenkamer, 2021a).	Businesses	National level	Pandemic	Medium/ Long term
Just transition	Business support	TOGS (*Tegemoetkoming schade COVID-19*) provided a one-time payment of € 4,000 to businesses in sectors impacted by restrictive Covid-19 measures (RVO, 2020).	Businesses	National level	Pandemic	Short term
Just transition	Business support	TVL (*Tegemoetkoming Vaste Lasten*) compensates businesses suffering over 30% lost income due to Covid-19. As of 1 Dec 2021, 353,136 applications have been filed, most of which (313,005) were accepted. The subsidy compensates 80% of losses, and if the paperwork is accepted by the tax authority, the remaining 20% is also paid. So far €6.7b has been disbursed by this scheme and almost €10b budgeted for the 2020-2022 period(Algemene Rekenkamer, 2021a; RVO, 2021e).	Businesses	National level	Pandemic	Medium/ Long term
Just transition	Income support	TOFA (*Tijdelijke overbruggingsregeling voor flexibele arbeidskrachten*) provides €550 support to those on flexible contracts who do not qualify for unemployment benefits (Ministerie SZW, 2020).	Employees and self-employed people	National level	Pandemic	Short/medium term
Just transition	Income support	TOZO (*Tijdelijke overbruggingsregeling zelfstandig ondernemers*) provided financial assistance to self-employed people (Algemene	Employees and self-employed people	National level	Pandemic	Short term

		Rekenkamer, 2021a). Amsterdam had more claims than the next four large cities combined because many people work in sectors like art and culture, tourism, taxi services and hospitality. Almost €5b have been paid via this scheme. As of 1 January 2021 this scheme was redesigned to help guide self-employed people to reinvent themselves. Amsterdam doubled capacity for helping self-employed deal with debt, get a business coach or orient themselves on the labour market. The policy was discontinued in October 2021, after which self-employed people can apply for specialized support (e.g. loans) if eligible for the business welfare scheme (Bbz) (Gemeente Amsterdam, 2021k).				
Just transition	Business support Income support	TONK (*Tijdelijk ondersteuning noodzakkelijke kosten*) grants temporary support for fixed costs to businesses and individuals suffering income losses due to Covid-19.	Businesses General population	National level	Pandemic	Short term
Just transition	Business support	KKC (*Kleine Kredieten Corona garantieregeling*) gives small businesses a line of credit up to €50,000; the government guarantees 95%. Budget is € 250m. Started in May 2020 and ended in 2021 (Ministerie AZ, 2020a)	Businesses	National level	Pandemic	Short term
Just transition **Green transition**	Business support Climate mitigation and adaptation	KLM: The government assembled a € 3.4b extra support package for the national airline KLM; €1b comes from taxpayers, and the rest from banks. It takes the form of a loan to be repaid within 5½ years. A few conditions were set, such as salary caps, no dividend payments, fewer night flights, 50% reduction in CO2 per passenger km by 2030 and 14% biofuel by 2030 (Ministerie AZ, 2020b).	Businesses	National level	Pandemic	Medium/ Long term
Just transition	Education and training	NPO (*Nationaal Programma Onderwijs*) seeks to keep vulnerable pupils from falling further behind during and after Covid-19. Its € 8,5b budget is disbursed to schools and municipalities (for providing other services) (Ministerie OC&W, 2013).	Children and youth	National level	Pandemic	Medium/ Long term
Just transition	Social support	MSP (*Maatschappelijk Steun Pakket*): a support package to combat the social effects of Covid-19. The three pillars are: intensifying initiatives for youth, vulnerable groups and promoting a healthy lifestyle. Most of the € 200m budget will be used to finance municipal initiatives (Ministerie VWS, 2021).	Vulnerable groups Children and youth General population	National level	Pandemic	Short term
Just transition	Social support Education and training	KKT (*Kwetbare Kinderen Thuis*): Emergency fund for children in dire need, often in a foster parent situation or where parents are under investigation. Social workers can apply for funds to buy items such as school materials or laptops. Approximately 30,000 children were helped by this fund (Ministerie VWS, 2020).	Children and youth	National level	Pandemic	Short term
Just transition	Business support	Municipal tax relief offered to various parties. Targeted businesses were	Businesses	Municipal level	Pandemic	Short term

		taxis and car-sharing companies, who received a postponement of dues. This was introduced in the first wave and ended on 1 July 2020. Afterwards, the city offered support to those with financial problems on an ad hoc basis (Gemeente Amsterdam, 2020c).				
Just transition	Business support	Advertisement tax will be introduced 2 years later than announced, due to Covid-19 (Gemeente Amsterdam, 2020g, pp. 14–15).	Businesses	Municipal level	Pandemic	Medium/ Long term
Just transition	Business support Food, medical and housing support	For three years (2020-2022) no fees for using public land will be collected for sidewalk cafes, and owners of houseboats and caravans will receive a 30% discount in the first year (Gemeente Amsterdam, 2020c).	Businesses Other groups	Municipal level	Pandemic	Medium/ Long term
Just transition	Business support	Taxes for events over 500 people is delayed to 2023.	Businesses	Municipal level	Pandemic	Medium/ Long term
Just transition	Business support Waste management and circular economy	Businesses that significantly reduced waste due to Covid-19 can request a waste tax deduction for 2021 (Gemeente Amsterdam, 2020c).	Businesses	Municipal level	Pandemic	Short term
Just transition	Social support	Residents can contact neighbourhood teams that help them with finances, health and social contact (Gemeente Amsterdam, 2021f).	General population	Municipal level	Pre-pandemic	Medium/long term
Just transition	Social support Education and training	A contact point for youth providing advice on work, education and finances can help ease the impacts of the pandemic. There are many programmes such as a job vacancy app and a website to contact employers or with various training programs (Gemeente Amsterdam, 2021f).	Children and youth Students	Municipal level	Pre- pandemic	Medium/long term
Just transition	Education and training	Helping hands: a project funded by the NPO had older pupils tutor younger pupils falling behind in their schoolwork as a result of Covid-19. A small company facilitates this by training the mentors and matching them. This relatively new initiative seems to have a positive effect. On the other hand, also the older students are disadvantaged by Covid-19 and have more social-skill difficulties so it is unclear how long it will continue or expand (Ministerie OC&W, 2021).	Children and youth	Municipal level	Pandemic	Unclear
Just transition	Social support Education and training	In order to give disadvantaged children and youth (0-32 years) the opportunity to catch up, educational programmes were launched for the summer (MidZomer Mokum) and winter (Midwinter Mokum) vacations. This consisted of various activities such as sports, theatre, coaching and tutorials (Gemeente Amsterdam, 2020f). The implementation was carried out at the district level, with varying budgets between €90k for the city centre to €400k for West Amsterdam, which financed	\	Municipal level	Pandemic	Short term

		individual grassroots initiatives. This was an integrated approach where various sectors of municipal policy were simultaneously deployed to address to the combined problems of vulnerable young people such as falling behind in school, loneliness, fear and depression, identity problems, lack of space for games and sports. It was viewed as a new way of collaborating in the municipal apparatus (Van der Veer and Panneman, 2021).				
Just transition	Business support	Open city initiative – Allowing parts of the street pavement to be used for other functions, either by residents or businesses. The latter included expanding room for sidewalk cafes and terraces given the limited indoor capacity for the 1.5m rule. This measure was popular: 1900 requests were received of which 75% approved. Very few citizen initiatives were requested, thus 'open city' was primarily commercial (Gemeente Amsterdam, 2020g).	Businesses	Municipal level	Pandemic	Short/Medium Term
Just transition	Investment in infrastructure	Proactive investment by speeding up infrastructure construction and maintenance and taking advantage of the 'window of opportunity' of having less people on the street. It also fit the policy goal of providing more low-skilled jobs (Gemeente Amsterdam, 2020g).	General population	Municipal level	Pandemic	Short/Medium Term
Just transition	Food, medical and housing support	Increase of personal budget for medical expenses (Gemeente Amsterdam, 2021i).	General population	Municipal level	Pandemic	Short Term
Just transition	Research Mental health services	A study on the impact of the 1.5m rule on the psychological health of people with visual and visual/audio handicaps and seeks solutions via Human-Centered-design principles (Hartendorp, 2020).	People with special needs	Municipal level	Pandemic	Medium/ Long term
Just transition	Social support Cultural offers	Amsterdam organized a series of guest lectures and workshops where role models (professional athletes, DJs, entrepreneurs and 'Dutch masters' artists) share their experiences to show how young people can stay positive in challenging times (Ministerie VWS, 2021).	VChildren and youth	Municipal level	Pandemic	Short Term
Just transition **Smart transition**	Digital access and competencies Social support	'Everyone connected' is an initiative that supplied 3,500 refurbished laptops to poor and computer illiterate residents in Amsterdam. It also gave 2,364 people Internet access via a USB stick. About 97% of the Dutch population has internet access, so this is not a large group mainly comprised of asylum seekers, welfare recipients and lonely elderly people. The recipients were found by using intermediaries from 68 different organizations (Goedhart, Tensen and Dedding, 2020; Gemeente Amsterdam, 2021g).	Vulnerable groups Immigrants Elderly people	Municipal level	Pandemic	Short term

3.2.2 Green transition policies

Some policies target or affect the physical environment. A majority of Dutch citizens felt in 2020 that the crisis should be taken as an opportunity to accelerate sustainability (Bijlo, 2020). In addition, the private sector as represented by the Chamber of Commerce argued that, with the economy 'on hold', it was an ideal time to introduce sustainability measures. This view was echoed by the museum branch; closures and restricted access during corona present a window of opportunity to introduce green solutions such as waste separation, insulation and replacing incandescent bulbs with LED lights (Museumvereniging, 2020). The table below contains a list of policies implemented in the physical domain and can therefore be considered related to the green transition.

Table 3 Green transition policies

Policy area(s)	Focus area(s)	Policy description	Target group(s)/ Beneficiaries	Responsible level of governance / Financing	Timing of policy	Duration
Green transition **Just transition**	Sustainability transition	The municipality is investing € 78m from the climate change fund to accelerate the city's sustainability ambitions and hopes this will trigger an additional €2.7b investment from the private sector. The measures include the installation of 32,000 solar panels, heating for 10,000 homes as well as insulation and renovation. 100 new green spaces will be realized and SMEs will receive assistance in environmentally retrofitting their buildings and developing sustainable products. Training will be given to unemployed to help them participate in these projects. This will also make the city less dependent on tourism and freelance work (Gemeente Amsterdam, 2020d; Schröder, 2020).	General population SMEs Unemployed	Municipal level	Pandemic	Short/Medium term
Green transition	Travel and mobility	Moving bicycles to the street to give pedestrians more walking space. This should only be implemented in certain cases (no freight traffic, trams) and only after other obstacles on the pavement have been cleared: like parked scooters and advertisements panels. As pedestrians are accustomed to avoid (also by law) the red cycle paths in Amsterdam, this required clear communication (Gemeente Amsterdam, 2020g).	General population	Municipal level	Pandemic	Short/Medium term
Green transition	Travel and mobility	The regional traffic authority invested an additional € 235 million in mainly traffic safety projects, public transport and travelling outside of rush hour. The idea is to use the crisis to make adaptations to the transport system (Verkeersnet.nl, 2020).	General population	Regional level	Pandemic	Short term

Green transition	Travel and mobility	Expanding loading and unloading times to reduce congestion.	General population	Municipal level	Pandemic	Short term
Green transition	Travel and mobility	Reduced rates for P&Rs and scooter/bike sharing.	General population	Municipal level	Pandemic	Short term
Green transition	Research	A grant was awarded to the Amsterdam School of Applied Science to investigate the impact of Covid-19 measures on public space and sustainability. The research "From Prevention to Resilience" found, for example, that walls to physically separate people can be built using recycled or recyclable materials for the same cost as plexiglass. Involving at-risk youth in the process can moreover contribute to social goals (Meys and Boon, 2021; Suurenbroek, 2021).	Researchers, universities and research institutes General population	Municipal level	Pandemic	Medium/ Long term
Green transition **Just transition** **Smart transition**	Research	In order to offer opportunities in the Covid-19 period, Amsterdam issued an open call for project ideas to promote sustainability (Gemeente Amsterdam, 2020e). Projects can receive up to €100k-500k (equal co-financing). Sustainability is broadly defined, including the economic dimension (recovery with retaining jobs) and the social dimension (helping migrants with digital transition).	Researchers, universities and research institutes Public stakeholders	Municipal level	Pandemic	Medium/ Long term
Green transition	Waste management and circular economy	Waste management – less pickups for businesses and more for residences due to increased online deliveries (Gemeente Amsterdam, 2020g).	General population Businesses	Municipal level	Pandemic	Short term

3.2.3 Smart transition policies

The pandemic accelerated the adoption of digital solutions, such as teleshopping, online education and e-health. The table below provides a non-exhaustive list of policies found during the desk research and in the expert interviews related to the smart transition.

Table 4 Smart transition policies

Policy area(s)	Focus area(s)	Policy description	Target group(s)/ Beneficiaries	Responsible level of governance / Financing	Timing of policy	Duration
Smart transition	Communication and knowledge sharing	As part of the ongoing programme *Gezond Leven* (healthy life), the national health institute has created a web portal to assist Dutch policymakers to improve health policy. Tailor-made advice is provided to municipalities, but also information on how to: (1) make an overview of health needs, (2) set priorities and goals (3) implement policy and (4) evaluate and adapt policy. It	Municipal staff	National level	Pre-pandemic	Medium/Long term

		contains a repository of studies and case study practices (RIVM, 2021).				
Smart transition	Big data	The Crowd Monitoring System Amsterdam (CMSA) uses counting cameras and Wi-Fi sensors to give insight into numbers and densities of pedestrians (Gemeente Amsterdam, 2020g, 2021j). An algorithm on the server analyses how many people are on the images. This information is converted into anonymous statistics and forwarded to municipal officials to regulate foot traffic. The public are informed about crowding levels via signs or online means.	General population Municipal staff	Municipal level	Pre- pandemic	Medium/ Long term
Smart transition	Digitalisation of public services Research	A research project was initiated to investigate the ethics of e-health. During Covid-19 many meetings were moved online. This raises issues of whether patients should always have the right to choose between physical and virtual consultations. Anonymous online appointments with healthcare professionals may be preferred, such as in cases of psychological issues, but it is unclear whether this creates a doctor-patient relationship in a legal sense. It also raises issues of accessibility as some people find physical meetings more difficult and others online (Schermer, 2020).	General population	National	Pandemic	Medium/ Long term
Smart transition Just transition	Digitalisation of public services Mental health services	The national fund earmarked for youth policy was used to temporarily expand outpatient psychological help and other preventative measures to improve the mental health and resilience of young people in Amsterdam. The project @ease provides an informal and safe space for teens to talk, usually to student volunteers, about their problems (Ministerie VWS, 2021, p. 11).	Children and youth	Municipal level	Pandemic	Medium Term
Smart transition	Digitalisation of public services Research	Many court hearings were delayed or abandoned due to Covid-19 or placed online. This research project surveys the problems posed by Covid-19 for the legal system in the areas of criminal law, immigration law and civil youth law, and whether these were successfully overcome. It focuses on the impact on vulnerable groups seeking legal recourse and whether this affected their trust in the legal system (Ter Voert, 2020).	Vulnerable groups	National level	Pandemic	Medium/ Long term

4 Policy impacts

Given that at the time of this writing most of the policies discussed in the previous chapter have been in place for a relatively short period of time, are mostly ongoing but with an uncertain status (most are considered 'temporary' but have been extended and/or modified as new pandemic waves hit) and interact with each other, it is extremely difficult to establish causality as regards impact. Given that normal ex-post evaluation is impossible at this juncture, this section will rely on a combination of circumstantial evidence (i.e. that the situation following the introduction of a measure *might* have been caused by it), examination of magnitudes (i.e. the 'follow the money' approach), consultation of available policy evaluations, opinions expressed in interviews and, finally, anecdotal evidence.

4.1 Economic impact

The pandemic has justified massive public-sector support to the economy, estimated at € 81.7b in the 2020-2022 period (Algemene Rekenkamer, 2021a), largely administered according to a 'trickle down' logic. Companies have been compensated for virtually all incurred losses resulting from the pandemic, including those caused by the imposition of restrictive measures, with few strings attached. This influx of public capital artificially buoyed the Dutch economy, allowing money to circulate in ways similar to pre-Covid-19 times, but without the actual economic transactions taking place. As explained in previous sections, there is substantial circumstantial evidence to support the claim that the direct economic impacts of Covid-19 were mitigated by this policy. After initial drops in consumer confidence and rising unemployment in 2020, a clear recovery was evident in 2021. As a result, ensuing impacts were also – so far – largely averted, such as bankruptcies and a crisis in commercial real estate. For example, a study performed in autumn 2020 on the impact of Covid-19 on city centres predicted significant rises in vacancies of shops, cafes and restaurants by 2022, especially in cities like Amsterdam that were more reliant on tourism and international business travel (Evers *et al.*, 2020). Thus far, these predictions have not materialized because economic support was continued, allowing shops to continue paying rents and wages (Evers, 2022). A more comprehensive ex-ante study investigated the economic impact in the Rotterdam region, estimating severe economic decline in 2020 with a slight recovery in 2021. Among other things, it warned for unprecedented levels of unemployment and urged structural and anticyclical investment (Manshanden, Koops and Van Oort, 2020).

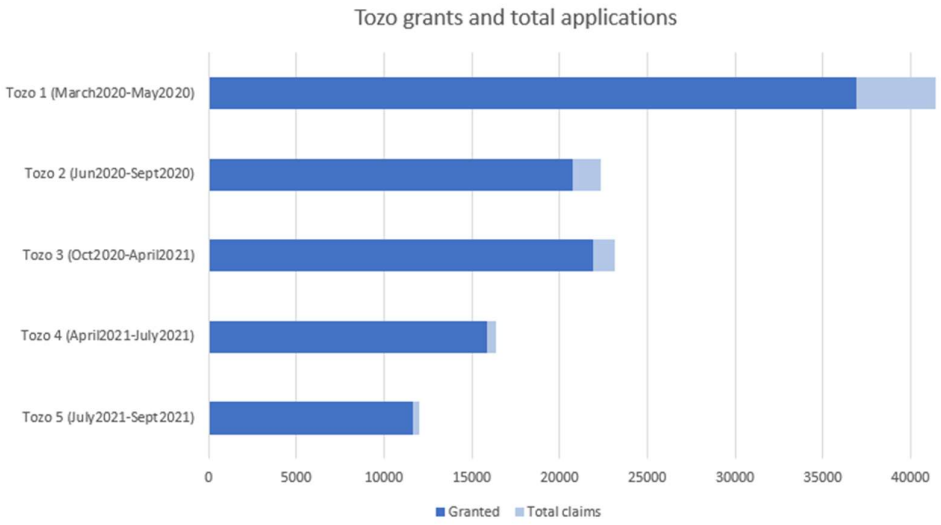
This circumstantial evidence corresponds to the assertion by the Netherlands Enterprise Agency (RVO), the administrator of many of the economic aid programmes, that it wants companies to remain in business. To this end, it strives for flexibility and charges no interest on loans (RVO, 2021c). For example, TOGS, introduced early on in the pandemic, sought to provide swift compensation to businesses for losses and, consequently, was not very discriminating. An audit of this scheme later discovered that about a third of recipients could not justify their eligibility (Algemene Rekenkamer, 2021b, p. 22). Further insight can be gained by testimonials by entrepreneurs about TOGS and TVL (RVO, 2021g). Several beneficiaries mentioned that it was relatively easy to file a claim (RVO, 2021b, 2021h), although one said TVL was more difficult than the TOGS scheme and recommended businesses hire a specialist (RVO, 2021d). One self-employed person in the cultural sector reported he had tried to apply for Tozo but was denied support because his partner had a part-time job. Luckily, TVL allowed him to completely offset the lost income so he didn't have to sell his house or businesses (RVO, 2021f). Some complained about bureaucracy: a hotel-restaurant indicated that because it was primarily registered as a restaurant, it received less compensation (RVO, 2021a). In some instances, businesses are asked to repay subsidies, for example, because they had overestimated losses and errors were common due to the uncertainty about the duration of lockdowns and other restrictions. Hairdressers, for example, were obliged to return TVL receipts because they were allowed to reopen relatively quickly (RVO, 2021h). One entrepreneur recommended reimbursement rather than upfront payments (RVO, 2021d). Finally, a few economic measures implemented at the municipal level were more successful or popular than others. For example, the offer of a business coach for self-employed people was appreciated (Gemeente Amsterdam, 2021a, p. 4) as was the tax relief offered to taxis and car-sharing companies (Gemeente Amsterdam, 2020g, pp. 14–15). On the other hand, the measures to stimulate the construction sector (e.g. by extending working hours) did not have much effect.

4.2 Social impact

The blow of losing one's livelihood was largely avoided by the economic measures described above. Those lucky enough to have fixed contracts usually kept their jobs and salaries. Those unfortunate enough to be laid off were often young: of all approved unemployment claims, 70% were for those between 18 and 27 years of age. Self-employed and freelancers could apply for support until the fall of 2021 when these policies were largely discontinued – currently these people are obliged to enter job training programmes and apply for basic welfare benefits (Bbz). The union of Dutch municipalities (VNG) is concerned about this because it creates even more uncertainty for a vulnerable group (VNG, 2021), but also because municipalities are responsible for social welfare policies. In practice, many self-employed work near the poverty level.

Amsterdam has a disproportionate number of people working in sectors that were hardest hit by the crisis, such as culture, tourism, taxi services and restaurants. As a result, the city had a higher share of its population filing unemployment claims. Also the percentage of self-employed (17%) in Amsterdam is higher than the Dutch average (12.3%), which is also higher (and growing) than the European average (CBS, 2019). On 1 November 2021, the number of applications filed for the Tozo-3 scheme in Amsterdam surpassed those filed for Rotterdam, Utrecht, The Hague and Eindhoven combined. Claims for other support schemes such as NOW, TOGS and TVL were also above average (Gemeente Amsterdam, 2021a). The figure below depicts the number of freelance/self-employed individuals applying and receiving aid over the five periods.

Figure 26 Claims in Amsterdam for self-employed people (Tozo)



Source: Gemeente Amsterdam (2021e)

In addition to the trickle-down social effect of the billions allotted to business support, the national government set up a €200m fund for social programmes, largely implemented at the municipal level. The extent to which local initiatives were paid by this fund is not always clear, which – again – makes it difficult to untangle the different levels of governance in the Netherlands in terms of Covid response. Below is an incomplete list of available information on the effects of social policies (see Section 3.2.1).

One national programme that was doubtlessly felt in Amsterdam was the fund for children in families under investigation for domestic violence. The fund provided caseworkers with vouchers to purchase items in a special webshop, most commonly toys (e.g. board games, inflatable swimming pools), hobby and crafts materials, school supplies and sports equipment. In some cases electronic goods were bought to assist the shift to online lessons. The children reported feeling less stressed and invisible as a result. The parents also felt unburdened and case workers appreciated the positive contact moment (Ministerie VWS, 2020). Another

project funded by the NPO called 'helping hands' had older pupils tutor younger pupils falling behind in their schoolwork as a result of Covid-19. A small company facilitated this by training the mentors and matching them. This is a relatively new initiative, but it seems to have a positive effect and has been cited as a best practice. However, the older students were disadvantaged by Covid-19 as well (Ministerie OC&W, 2021a).

One of the social Covid-19-response policies in Amsterdam was 'everybody connected' where 3,400 people were given refurbished laptops and almost 2,400 given internet access via a USB stick. In an evaluation, the policy was largely seen as a success. Many disadvantaged people receiving a laptop had felt alienated (the lockdowns forced children to follow online education and they were cut off from social life and ordering goods online), and this programme was seen as a lifeline. Some immigrants were informed that their mandatory language classes would be moved online, hence the laptop became a basic necessity. The volunteers were praised for helping the new users understand their computers, set them up, and fix any initial problems. On the other hand, there were some criticisms about the eligibility criteria for laptops, which was sometimes seen as arbitrary (Goedhart, Tensen and Dedding, 2020).

Another available evaluation related to the role of social workers. This found that the initial focus was on taking stock of the needs of residents in neighbourhoods. These professionals adopted a pragmatic approach and used any means at their disposal to show that they were available to help. They utilized digital tools to foster community forming in the face of the restrictive measures and combined formal and informal means. Despite the fact that the pandemic initially strengthened solidarity and the will to help one another, some communities have come under increasing strain (Rocak, 2021).

The Midsummer Mokum programme directed at schoolchildren was hailed as a success, especially because it involved an integrated approach to the multiple problems being faced by young people (falling behind in school, loneliness, fear and depression, cultural challenges, unsuitable living environments, insufficient space for games and sports, etc.). It was considered a best practice in terms of governance and coordination between municipal departments (Van der Veer and Panneman, 2021) and provided a new way of collaborating by direct management up front, with early involvement of all relevant parts of the municipal apparatus.

The Crowd Monitoring System Amsterdam, although operational, was not sufficient to provide people with adequate real-time information necessary (Gemeente Amsterdam, 2020g). In addition, the initiative to offer reduced rates at P&R facilities and moped/bike sharing for teachers was barely used (Gemeente Amsterdam, 2020g). The measure to allow restaurants and bars to annex street space to give patrons more room was a resounding success, and many pavements are now fenced off by commercial establishments. The same is much less effective for grassroots neighbourhood initiatives for outdoor street activities (Gemeente Amsterdam, 2020g, pp. 10–11).

4.3 Environmental impact

In general, the pandemic has not been used to leverage the green transition. Worldwide, the Global Recovery Observatory reports that 'green' investments constitute less than 20% of long-term measures. The vast majority of support given by China, Russia, India and the United States is environmentally damaging, although this has recently improved in the US and may become positive if the infrastructure bill is passed (Dijk *et al.*, 2021, p. 24). According to the Dutch central bank (DNB), to comply with the Paris agreement, investments from the recently established €20b NGF (*Nationale Groeifonds*) must take climate change into account, but it is unclear how much. The €1.7b Invest NL fund aims at stimulating the energy transition, but has recently been used for emergency aid to businesses (Dijk *et al.*, 2021, p. 26). The estimated costs of meeting Dutch climate goals are estimated at 1.2% GDP or € 10b, which is still lower than the support given to fossil fuels (Metten, 2021). A very rough indication of the share of loans given to businesses by Dutch banks suggests that 38% could be labelled 'green' according to the European Commission taxonomy (Dijk *et al.*, 2021, p. 36). This is even lower, about 26%, for institutional investors like pension funds. The share of 'green' companies in the stocks and bonds market is extremely limited. Therefore, from these sources at least, it appears that the opportunity to use the crisis to benefit the environment was not immediately seized.

When we turn to the national policies implemented in reaction to the Covid-19 pandemic, we see that no conditions were placed on environmental or other public-interest considerations: compensation was granted purely on the basis of lost income. As a result, the public support does not necessarily promote sustainability or the green transition. This is immediately apparent when considering the top-10 companies receiving the most support from the NOW-scheme. These are among the highest polluters in the Netherlands. These figures were made publicly available for the first wave of the pandemic. Unfortunately, but no update has been found.

Table 5 Top 10 beneficiaries of the NOW scheme in 2020

Company name	Type	Support NOW phase 1
Koninklijke Luchtvaart Maatschappij N.V.	Airline	293,406,525
NS Reizigers B.V.	National railway	53,280,225
Booking.Com B.V.	Webshop	44,091,729
Holland Casino N.V.	Gambling	31,885,515
DAF Trucks N.V.	Industry – automotive	28,257,864
Schiphol Nederland B.V.	Airport Schiphol	27,814,296
Tata Steel IJmuiden B.V.	Industry – steel	27,605,562
Tempo-Team Uitzenden B.V.	Employment agency	24,707,061
Transavia Airlines C.V.	Airline	24,265,698
GVB Exploitatie B.V.	Public transport Amsterdam	20,517,378

Source: UWV (2020)

In contrast, Amsterdam did devise a strategy to accelerate its sustainability objectives. Citing the pandemic as an opportunity, an extra € 78 million was allocated for installing solar panels, renovating and insulating homes and creating green open spaces throughout the city. This is being presented as a way to boost employment and diversify the economy away from tourism and freelance work towards high-skilled jobs in technical services and construction (Gemeente Amsterdam, 2020d). Although it is too early to know the impact of these public investments, it is hoped to trigger an additional € 2.7 billion in private-sector investment and approximately 3,800 full-time jobs (Schröder, 2020).

When looking at the other physical measures taken in Amsterdam (not necessarily environmental, but instead pertaining to the built environment) we see mixed results. For example, the measures to provide more room for pedestrians was disappointing: by habit they still avoided cycle paths and crowded situations near schools persisted because cars continued to park and idle at drop-off points (Gemeente Amsterdam, 2020g, p. 1). The measures to adjust waste pickup times and capacity to reflect the new behaviour (e.g. online shopping) was deemed successful. One interesting proactive traffic-calming measure was the agreement brokered by the regional authority MRA with large employers to allow more flexible working hours (MRA, 2020). A study by PBL argued that a small change in traffic volume brought about by such measures or by increased teleworking would be sufficient to eradicate traffic jams (Buitelaar *et al.*, 2021). Although theoretically true, not long after the publication of this study, congestion returned to normal levels (*AD.nl*, 2021).

Finally, one can take pause to reflect on all the policies that were *not* implemented. Given the considerable problems of mass tourism directly prior to the pandemic (e.g. overcrowding of historical areas, marginalization of amenities for locals), it is surprising that the opportunity was not seized to take swift action before the economy reopened (incidentally, the travel website Booking.com received the most support from the NOW scheme of any company in Amsterdam). Similarly, given that Airbnb exacerbated problems in the housing market (driving up prices and removing housing stock) it is remarkable that this period was not used to place further pressure on this digital platform. The same can be said for implementing more cycle-friendly policies such as in Paris or Milan or to expand and improve green spaces. The municipality experimented briefly with closing a major artery, but this was not carried forward. The same is of course true for the national level: no fundamental change in transportation or environmental policy was implemented as an opportunity stemming from Covid-19.

4.4 Governance impacts

The pandemic had widespread impacts on governance. These impacts will be discussed according to the type of governance relationship: vertical (between levels of government or scales), horizontal (between policy fields), and territorial (between and within regions).

4.4.1 Vertical governance

The immediate impact of the pandemic was a far-reaching centralization of authority. Within weeks, the national government assumed control of coordinating the response, and this was reinforced by one of the first official public addresses of a prime minister outside of wartime. A closeknit power structure was put into place consisting of three national government crisis-management teams (Ministeriële Commissie Crisis Beheersing (MCCB), Interdepartementale Commissie Crisis Beheersing (ICCB) and the Outbreak Management Team (OMT). Local governments had little direct access to these teams (Edelenbos *et al.*, 2022, p. 25). Outside of the Covid-19 response, many other policy areas were put on hold until a new government was formed. By late 2021, for example, only the Netherlands and Bulgaria had not submitted their national plans for the European Recovery Funds (Notenboom, 2021).

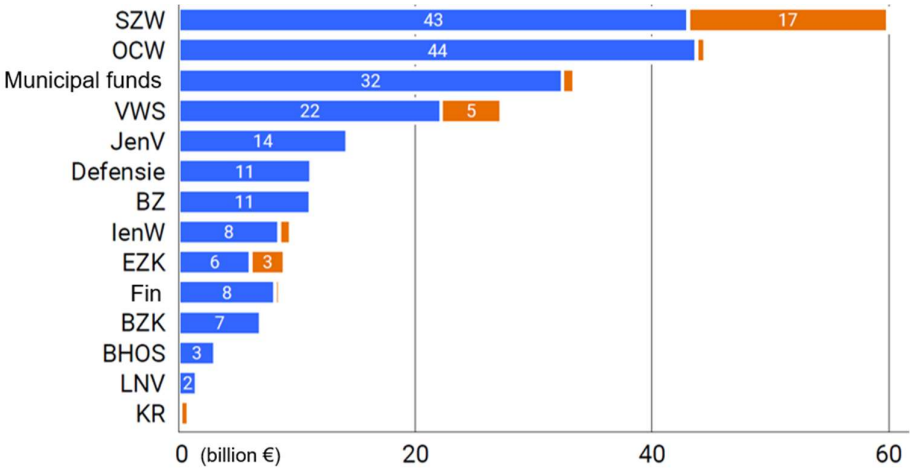
From the perspective of regions, multi-level governance was lacking (Edelenbos *et al.*, 2022). In the first weeks of the pandemic, municipalities had to deal with coordinating the policy response and were given a lump sum from the national government for this. However, the extra workload this created placed an unacceptable strain on the municipal organization (Van der Veer and Panneman, 2021). The decision to centralize authority came as a relief to Amsterdam's decision-makers. Afterwards, lower tiers of government were mainly charged with drafting residual or operational policies. In some cases, such as Amsterdam, local authorities requested extra funds to deal with specific healthcare issues stemming from the pandemic. The resulting dialogue was employed to put other items on the agenda, such as the structural problems in healthcare or health inequality (Van der Veen and Meijaard, 2021).

After the first wave, the government experimented with a decentralization of restrictive measures – such as the closure of shops and cafes – to allow for regional differentiation. However, as individuals in high-risk areas with heavy restrictions simply travelled to enjoy facilities elsewhere (and spreading infections as a result), a renationalization quickly followed. On the other hand, given the growing social tensions surrounding the restrictive measures, some lower tiers of governments were happy to be relieved of this responsibility (Edelenbos *et al.*, 2022, p. 25).

4.4.2 Horizontal governance

In general, Covid-19 policies were administered by individual ministries rather than via interdepartmental cooperation. Figure 27 below depicts the normal budgets of the various ministries of the national government (in blue) and the extra budget for Covid-19 policies (in orange) for 2020. The most significant is the Ministry of Social Affairs and Employment (SZW) who administered the NOW policy via its agency UWV. After that, we can see the Ministry of Health, Welfare and Sport (VWS) for testing and vaccinations and the Ministry of Economic Affairs and Climate Policy (EZK), which is responsible for the TVL scheme via its agency RVO. This distribution shows that the Covid-19 policy response was largely implemented via the existing bureaucratic apparatus, rather than through the creation of an integrated or coordinated mechanism.

Figure 27 disbursement of covid funds by ministry



Source: Algemene Rekenkamer (2021b, p. 19)

There seems to be more evidence of horizontal governance innovations in Amsterdam. Cooperating between policy areas was already considered important before the pandemic, but this was given further relevance. Two examples emerged from the interviews: collaboration between healthcare actors and central crisis-management at city hall. With respect to the former, it appears that Covid-19 accelerated and scaled-up various activities to close the health gap. Once the pandemic hit, it was evident that more cooperation was needed between partners to deal with bed shortages, but also with respect to chronically ill patients since these often require IC care. Individual facilities could not handle these problems (Van der Veen and Meijaard, 2021). As a result, cooperation between healthcare providers, insurers and the municipality intensified within the already existing *Vitaal Gezond* programme (Van der Veen and Meijaard, 2021). The second example regards the regular meetings with representatives from different municipal departments to set short-term priorities (Van der Veer and Panneman, 2021).

Within the municipal organization, there were mixed expectations about the lasting impact of the pandemic on horizontal governance. One respondent felt that this would not significantly change interdepartmental relations (Vermeulen, 2021). Others argued that the crisis response had benefits that could be carried forward. Specifically, the regular meetings between representatives of different municipal departments to discuss major issues before decisions were taken by aldermen or the municipal council not only contributed to integrated decision-making, it also countered a political culture of post-hoc denouncement. The pandemic had necessitated this kind of arrangement, but its efficiency benefits may give it a permanent place (Van der Veer and Panneman, 2021).

4.4.3 Territorial governance

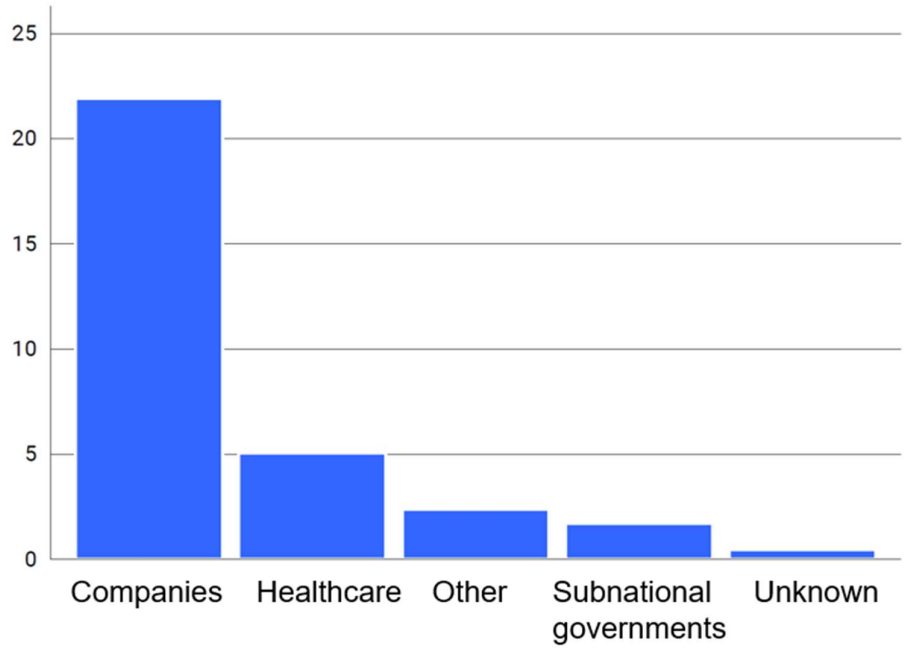
Within the greater Amsterdam region, the pandemic did not seem to profoundly affect institutional relationships. A review of the meeting minutes of representatives available on the MRA website (regarding spatial planning, mobility) revealed that the pandemic was rarely mentioned. Moreover, no palpable change in policy occurred; there is a high degree of path-dependency in the regional talks. The only mention of the pandemic does not indicate a major change: “The expectation is that one of the central issues in the formation of a new government is a recovery plan. The MRA can play an important role in this as the motor of the Dutch economy” (MRA, 2021). In terms of process, the shift to online meetings made it easier for municipalities in the MRA to meet, and this has not seemed to affect the quality of the discussions due to built-up trust prior to the pandemic (Vermeulen, 2021). Finally, Amsterdam was faster in its response to the crisis than the other municipalities in the region, so in general, they could profit from the city’s experience and greater institutional capacity (Van der Veer and Panneman, 2021).

4.5 Financial impacts

Within the European Union, the Netherlands regarded as adhering to the austerity or neoliberal school. According to this philosophy, to produce new economic growth a crisis should be met with cuts in public spending to keep the budget balanced and taxes should be kept low. This stance assumes that the underlying socioeconomic fundament is healthy, and the main goal is to return things to normal. Another school of thought is that many problems exist within society (e.g. inequality, climate change) which could be addressed in tandem with crisis support measures (Werkgroep corona MRA, 2020). This view is currently taken in Europe within the European Green Deal and EU NextGeneration funding.

Looking at the measures that the Netherlands has implemented, it seems to be maintaining its reputation of putting the economy first, although the position on austerity has been abandoned. Budgeted at over € 80 billion for the 2020-2022 period, the costs of the Covid-19 policies are enormous. The vast majority of this money is directed at compensating businesses for losses (see Figure 28). This financial injection provided a socioeconomic cushion, as employers can continue to pay wages without a cashflow. Given the extremely low interest rates and the Netherlands' high credit rating, borrowing money is neither problematic nor expensive. Residual policies, like those dealing with increasing inequalities resulting from digital divides, segregation and working conditions are largely implemented at the municipal level and have much lower budgets. This is not to say they have not been effective, as the refurbished laptop policy in Amsterdam shows.

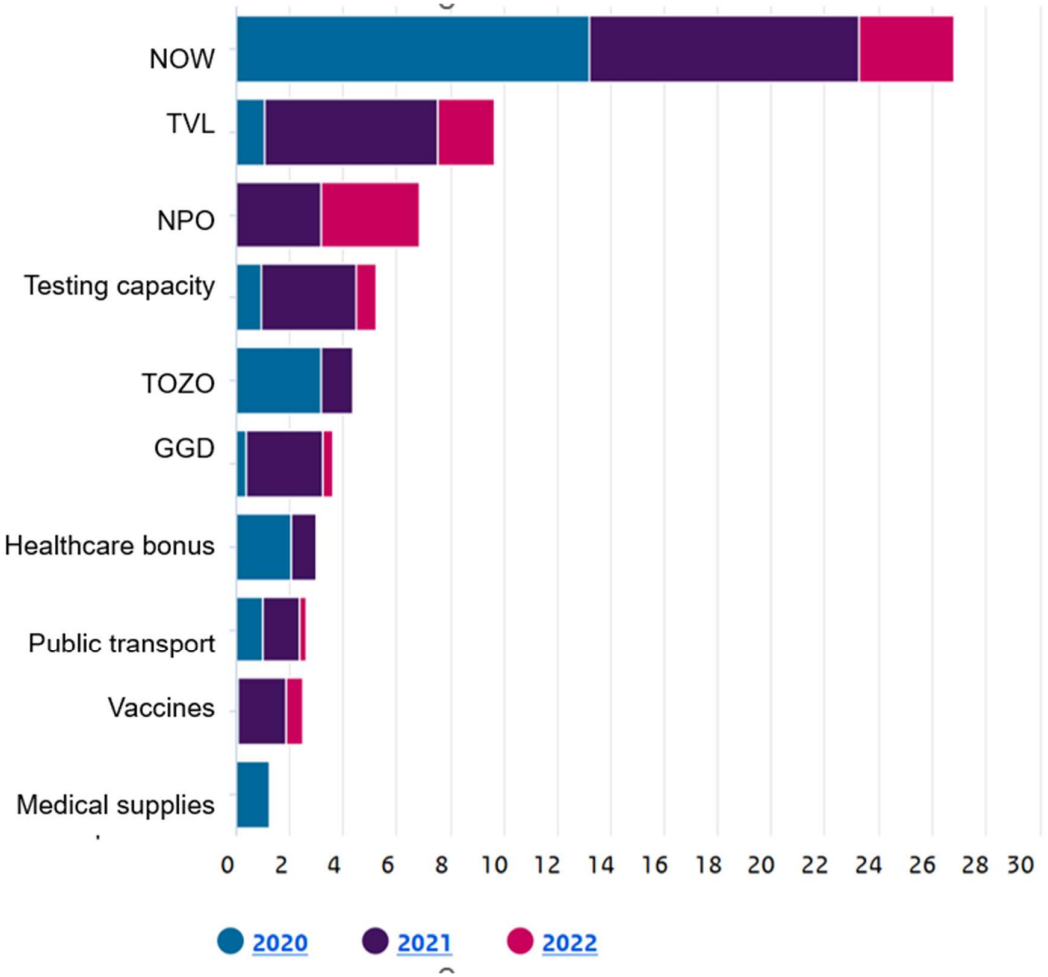
Figure 28 Expenditures on Covid-19 policies by recipient (in € billion) in 2020



Source: Algemene Rekenkamer (2021b, p. 8)

Figure 29 provides further elaboration. The NOW scheme helping businesses pay salaries costs the most money, followed by the TVL scheme to compensate businesses for lost income. Educational measures came in third, introduced only in 2021, as the effects on children became apparent. Other expenditures that occurred mainly after 2020 include testing, vaccines and support to healthcare regions.

Figure 29 Budgeted expenditures on Covid-19 policies (in € billion) by policy in 2020-2022



Source: Algemene Rekenkamer (2021a)

The crisis has placed a strain on public finance. As stated, municipalities are prohibited from running a deficit, implying that any extra costs had to be offset by income, use of savings or cutbacks. The national government does have this option but is limited by European regulations and political orientation (the ruling party is the fiscally conservative Liberal Party). The Netherlands Court of Audit's report noted a sharp increase in both expenditures and fixed costs in 2020 whereas revenues remained fairly constant. After four years of surpluses and five years of paying back the national debt, public finances are again running a deficit. In 2020, this reached almost €34b (4.3% GDP) and the debt € 435b (54.5% GDP). These figures are not alarming by European standards. In addition to issuing loans and providing grants, the state has underwritten businesses' ability to pay creditors. This policy does not cost anything unless the guarantee is called upon. According to the Netherlands Court of Audit, the financial risk (exposure) of the various guarantees has placed the Netherlands in the same position as in the height of the 2008 credit crisis.

In short, despite the vast amounts of money being invested to shield the Dutch economy from the impact of the pandemic and restrictive measures, and the guarantees given to Dutch companies, the verdict is that the Netherlands is still relatively healthy financially and can afford to take some risks to keep the economy intact.

5 Future policy directions

The direction that the pandemic, and hence policy with respect to it, will develop is shrouded in uncertainty. There is of course the much debated substantive uncertainty (we do not know how long the pandemic will continue to plague society) but also normative uncertainty (fundamentally, we cannot agree on a course of action, what the impacts of policy (including side-effects) are, or what constitutes a threat or an opportunity). In this sense, the pandemic is no different from the many other 'wicked problems' facing society, such as climate change, the energy transition, the 'Internet of Things' and social justice. It is therefore understandable that the implications of the pandemic are usually interpreted according to one's own ideas and professional expertise (Forsyth, 2020). Rather than signalling something entirely new, most experts seem to point to the trends they believe will be intensified, slowed, or just temporarily interrupted by Covid-19. This can point to either an opportunity or an imperative for reform.

Bearing this in mind, this section on future policy directions will discuss some of the 'imaginaries' which are invoked when talking about future policy directions. This builds on the discussion on the post-covid city (Marshall, 2021; Meys and Boon, 2021), for example, whether Covid-19 will result in urban densification or sprawl (Evers, 2020). The divergence of opinion about the long-term impact of Covid-19 is evident from the different blog posts on the urban development website gebiedsontwikkeling.nu, hosted by TU Delft (Schoorl, 2020). At the time of this writing, as the pandemic seems to be coming under control, this debate is already feeling antiquated.

5.1 Calls for proactive policy change in Dutch society

In the Netherlands, research institutes and think-tanks have considerable sway over government policy. Some are overtly advisory in nature whereas others are more oriented towards providing a solid knowledge base for decision-making. These institutions, usually funded by the public sector, generally strive to be as neutral as possible, and are not formally affiliated with political parties or societal groups.

A case in point are the three Dutch *planbureaus* (one for economy, society and environment) that carry out research for the national government (mostly ex-ante and ex-post policy evaluations), but sometimes venture into the advisory realm. In this sense, their orientation is comparable with the ESPON programme. In May 2020, all three issued a combined entreaty to the government to not approach the pandemic in a fragmented way according to traditional policy sectors, but through a broad conceptualization of quality of life. They also urged the government to:

- Seize opportunities to accelerate the realization of long-term goals;
- Take into account disparities between societal groups and regions;
- Refrain from fixating on a final vision (e.g. 'the new normal').

In retrospect, this advice largely went unheeded (the government could be forgiven, given the urgency, for relying on existing institutional structures and focusing on the health emergency). Later, in February 2021 the *planbureaus* issued a policy brief that again urged the government not to 'waste the crisis' but use its disruptive power to introduce much-needed reforms (SCP, PBL, and CPB, 2021). This was essentially a call for proactive policy in line with the European Commission's thinking with respect to the just, green and smart transitions. Again, we do not see much evidence of this occurring at either the national or municipal level.

Another institute, the RVS (Council for Health and Society), recently identified five necessary paradigm shifts emerging from the crisis (Raad voor Volksgezondheid en Samenleving, 2021). In their view, the government must refocus its attention:

- From caring for individuals to caring for society; healthcare policy should be linked to social inequality as low educated people live on average six years less and have 15 fewer years of health.

- From lifestyle to environment: refocus attention away from influencing individual behaviour to promoting healthy environments, with adequate housing, recreation and facilities.
- From product-driven to value-driven care and support: aging will make the current approach of solving health problems untenable: more attention should be devoted to maintaining quality of life and improving the attractiveness of the healthcare sector.
- From institutional interests to the public interest and cooperation; more flexibility needs to be built into the system and cooperation stimulated between the healthcare and the social system.

These recommendations are quite similar to the points raised in the interview with the *Vitaal Gezond* programme: focus on maintaining the supply side and try to reduce demand (Van der Veen and Meijaard, 2021). They also echo the *planbureaus*' recommendation to use the crisis to implement major reforms. It is unclear to what extent these recommendations are being followed up. As of this writing, the new government coalition agreement announced it will curb rising healthcare costs by 'flattening the curve' on expenditures – a decision which met public backlash. It should be borne in mind that these recommendations are far from novel. Most of the points articulated by the RVS were raised in various studies over the past two decades. The pandemic simply provided an opportunity to put these issues on the agenda again.

Finally, with an eye on the long-term, the youth branch of the national social works council (SER) urged the national government to improve the situation of young people, who were in their view disproportionally affected by the crisis. They demanded: financial support to students experiencing delays, more entry-level jobs and a green recovery policy (SER-jongerenplatform, 2021). They also saw the opportunities posed by Covid-19 for enhanced digitalization of, for example, education and remote working, especially for disabled youth. Their recommendations include: (1) Involve youth in policymaking: they have a fresh perspective and a stake in the future; (2) Dare to be creative: tap the innovative potential in society, listen to new ideas (3) Consider the impact on future generations in policymaking. Again, most of these recommendations are rather predictable given the mission of the authors; the pandemic just provided an opportunity to raise these issues in a different light.

5.2 Reflection on transitions

We can consider whether the measures which have actually been put into place answer the calls above. To what extent are the structural weaknesses exposed by the pandemic being addressed? To what extent do they contribute to a more long-term holistic approach? To discuss this, we will consider the three transitions identified in this report.

- **Just transition (socioeconomic policies)**: the vast majority of socioeconomic policies, proactive or reactive, are set at the national level. In many cases, they are centrally administered as well. In terms of money, the vast majority has been directed to businesses rather than individuals in an attempt to absorb the socioeconomic impact of the pandemic and avert an economic recession. Social policies can largely be seen as residual to this effort and are more local. An exception to this is the NPO (education) which has a substantial budget and has financed various policies to support at-risk children and youth.

- **Green transition (physical policies):** some policies implemented in response to the pandemic directly affect the physical environment, such as social distancing and closures of public spaces to prevent gathering. Interventions into the physical environment could be implemented in a more environmentally friendly way (Suurenbroek, 2021) and a majority of Dutch citizens felt in 2020 that the pandemic should be taken as an opportunity to accelerate sustainability (Bijlo, 2020). In addition, the Chamber of Commerce argued that, with the economy 'on hold', it was an ideal time to introduce such measures. This view was echoed by the museum branch; closures and restricted access during Covid-19 allowed them to introduce green solutions such as waste separation, insulation and replacing incandescent bulbs with LED lights (Museumvereniging, 2020).

- **Smart transition (digital and health):** most seem to agree that the pandemic underscored the importance improving digital services and their accessibility. In particular the healthcare system and eHealth should be rolled out further. Online education proved possible and some advantages have been signalled (not only in terms of efficiency but also participation) but weaknesses as well, particularly with respect to unequal access to equipment and Internet.

5.3 Amsterdam case

In 2020, the municipality of Amsterdam commissioned the Boston Consulting Group to outline the expected impacts of Covid-19 on the city. The resulting report made predictions for the short term (2023), drew up three scenarios for longer-term impacts (2030) and, based on these insights, sketched out perspectives for future action. With respect to the latter, it asked: which interventions, given the territorial and financial means available, should the municipality put in place to address the opportunities and threats in each scenario?

BCG considered the threat to equal opportunity as the most serious impact of Covid-19 (BCG, 2020). More than the other themes, it is difficult to repair this social damage, especially when it concerns education or work. A number of robust municipal measures were suggested which applied in all scenarios:

- **Education**: addressing language and other disparities as well as segregation, more digital equipment and support for deprived population, improving teacher training, supplying better libraries and other public study areas, combating discrimination.
- **Work**: creating a better overview of regional and national training schemes, providing personalized training to hone skills to labour market requirements, making certificates to facilitate matching people to jobs, offering short-term training in general skills (digital work), and improving the position of (flexible) workers.
- **Health and lifestyle**: guaranteed availability of healthy food, maintaining healthcare capacity, improvement in e-health, identification of at-risk groups.
- **Built environment**: combating segregation in cities and neighbourhoods, making investments in public spaces and services.

These general recommendations were supplemented by scenario-specific ones. For the 'smart' scenario this includes (1) a massive digitalization push in education, health and SMEs, (2) large-scale retraining towards growth sectors, (3) improving the ecosystem for innovation and valorisation, (4) implementing nature-based solutions, (5) creating an 'innovation axis' from Amsterdam's Zuidas business district to the airport, (6) accelerating the energy transition. For the 'connected' metropolis this includes (1) attracting visitors from elsewhere in the Netherlands and neighbouring countries, (2) higher quality and smaller scale facilities, (3) spreading activities to other parts of the city, (4) distinctive profiles for neighbourhoods, (5) improving sustainable urban transport, (6) regulating lodging supply and visitor categories. For the 'regional' scenario the measures include: (1) sufficient social/cultural facilities in every community, (2) urban expansion to the north, west and east and retaining sufficient housing, (3) improving vocational training, (4) supporting regional entrepreneurism, (5) stimulating circular economy, (6) rolling out decentralized energy systems (BCG, 2020).

Later, the municipal spatial planning and sustainability department, in its publication, *The City after Corona*, sketched out a number of 'lessons learned' from the pandemic (Gemeente Amsterdam, 2021d, pp. 10–16):

- **Digitalization**: Covid-19 has sped up this process and introduced new digital innovations into our lives from teleworking to flash-delivery services. This process has been most pronounced in dense urban areas. Interestingly, teleworkers in cities are happier about their location than those in the suburbs. A lesson learned is that compact urbanization not only contributes to better physical accessibility, but also digital connectivity.
- **Temporal flexibility**: partly due to digitalization, personal and work hours are less rigid than before. This has implications for mobility and work locations: city centres are expected to profit,

monofunctional office locations should lose out. This can also exacerbate inequalities as not all jobs have become equally flexible.

- **Public space**: prior to the pandemic, Amsterdam focussed on megaevents and mass tourism, which impacted public space. Parks are used much differently after Covid-19. More by residents, fitness training classes and other small-scale individual or commercial activities. The quality of the green space is important, and this should be borne in mind when redesigning monofunctional post-war neighbourhoods.
- **Vital neighbourhoods**: Covid-19 has enhanced the visibility of the neighbourhood and made residents more engaged. Urban planning should return to this level of scale. It is important to heed the differences at this level: some neighbourhoods were hit much harder than the pandemic and had fewer territorial resources to soften the blow (good transport, parks, mixed-uses etc.).

Reflecting on the impact of Covid-19, the municipality of Amsterdam wrote: "the worst-case scenarios have been averted and Covid-19 did not seem to cause major trend breaks. If anything, it seems to have strengthened existing trends" (Gemeente Amsterdam, 2021d, p. 6). Some of these existing trends, however, are worrying. Particularly those regarding social inequality and affordable housing have become more acute since the pandemic, as healthcare workers and teachers become priced out of the city (Van der Veer and Panneman, 2021). Contrary to the saying 'never waste a good crisis' as urged by the *planbureaus,* it seems that Amsterdam has not fundamentally rethought its policy direction or used the pandemic as a springboard to implement (unpopular) policies (Vermeulen, 2021). Instead, the pandemic seems to have bolstered its resolve to continue the policy line in place.

Upscaling to EU regions

- The three-party approach taken in the *Vitaal Gezond* programme has potential for implementation elsewhere as the experience in Amsterdam is that each partner (insurers, providers and government) brings something unique to the table (Van der Veen and Meijaard, 2021).
- The initiative by the municipality of Amsterdam to invite scientists from a variety of disciplines to reflect on the meaning of the pandemic and offer recommendations provided a relatively swift way to broaden the perspective of the civil service (Gemeente Amsterdam, 2020a). This could be implemented wherever close contacts exist between government and the academic community.
- The Dutch tradition of drawing up and continually revising long-term strategies, often by using scenarios, proved its worth in the pandemic. This allowed the pressing health issues to be considered within a wider framework, making it easier to approach the crisis in a more holistic manner.

6 Regional recommendations

- **Policy Recommendations**
  - The swift implementation of digital solutions in healthcare (eHealth) in response to the pandemic signals a way forward to address the structural supply problems in the system. It is expected that this will become even more needed given aging, rapid medical-technological developments and limited supply of healthcare resources and professionals.
  - Covid-19 has shown that healthcare needs to be fundamentally rethought. Instead of focussing on solving individual health problems, society as a whole should be placed at the forefront. For example, shifting attention from lifestyle changes to promoting a healthy environment. In addition, the link between health and social policy needs to be strengthened.

- **Governance Recommendation**
  - Taking a robust long-term strategic approach is advantageous. It is, for example, short-sighted to issue a call for innovative ideas to tackle the impacts of Covid-19 if these do not fit into a wider strategy and cannot be upscaled. The Amsterdam case has moreover shown that, given that a broad, adaptable strategy for 2050 was being prepared, no specific Covid-19 policies were deemed necessary. Specific short-term policies should be incorporated into the broader long-term strategy. In this sense, the municipal policy can be considered resilient to external shocks.
  - Remain open and vigilant about the future. Scenarios which consider unlikely events or divergent trends should always be drawn up to remind policymakers that specific problems and their potential solutions can change dramatically in different contexts. For example, groupthink can be countered by considering the opposite perspective (e.g. worst-case scenario during good times, best-case scenario during crises). This implies that one remain vigilant about a potential new pandemic, even if Covid-19 has been successfully resolved.
  - The emergency processes created in response to the crisis in Amsterdam engendered a cultural shift in politics towards cooperation across sectors and informing each other proactively rather than disagreeing afterwards. This was seen as an improvement and officials felt that it should be carried forward after the pandemic.

- **Territorial Recommendations**
  - Digitalization, accelerated by the pandemic, has proven to reinforce spatial centralization rather than decentralization tendencies, thus enhancing urban densities. Spatial planners should take this into account and provide amenities that facilitate social interaction, strengthen cohesion and improve quality of life. Examples include urban parks and neighbourhood centres.
  - Crisis management was facilitated by a tradition of long-term strategy making. Creating an input round of experts (professors, scientists) helped to provide a solid evidence base for policymaking.

- **Financial Recommendations**
  - Far-reaching national measures were implemented swiftly to avert economic collapse and mass unemployment. These were largely successful but almost exclusively focussed on monetary support with little attention paid to the ‘just’, ‘green’ and ‘smart’ transitions. While understandable given the circumstances, these measures could have

been linked to a requirement to draw up a plan for improving business activities in these directions.

- The Netherlands is the only EU country not to have submitted a recovery plan under the NextGenerationEU programme. Given the budgetary constraints at the municipal level, this money could have been put to good use in financing proactive policies. This underscores the importance of considering multiple scales in policymaking (from local to European).

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