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Germany's Planned Public Investment Push: Fiscal Dilemmas and Missing Dimensions*

ABSTRACT

Germany's new coalition government, in place since December 2021, has called for a decade of "investment into the future," an ambitious public investment push, focused on achieving climate neutrality, fostering digitalization, advancing science and education, and improving infrastructure. Yet, the government has also committed to refraining from tax increases and returning to its fiscal anchor (a constitutionally mandated "debt brake" that has been suspended for 2020–2022), and it has not indicated cuts in other spending items that could make room for increased investments. How does this hang together? Part of the answer lies in doing as much as possible before the debt brake bites again in 2023, and part of it lies in scaling up existing extrabudgetary mechanisms to circumvent the self-imposed fiscal and budgetary confines. Yet, without a more comprehensive approach, one that combines innovations in infrastructure financing with a clear accounting of fiscal risks and significant reforms in public investment governance, the government's ambitious public investment push is likely to fizzle out.

Public investment has been kept "low for long" in Germany and the resulting public infrastructure deficits are seen as a major bottleneck for the county's economic growth and development.[1] For the last two decades, Germany has kept its public investment levels much below those of many of its European partners,[2] and, specifically, it failed to advance investments in key "future-oriented" areas (e.g., related to its digital transformation, energy transition, and aging).[3] Bending to public pressure, previous federal governments occasionally asked expert commissions and scientific councils to advise on increasing investment, including public investment, and discussed key problems and reform needs for public infrastructure.[4] Yet, and notwithstanding some procedural improvements to improve efficiency,[5] little was done to advance the volume of public investment in key sectors. As a result, there has been a common view that Germany continues to have a large overall "infrastructure hole" (The Economist 2021), and both domestic and international observers have been urging fast action to increase public investment.[6] At the same time, there has also been a view that two decades of underinvestment have left the country with an urgent need for further significant administrative reforms, including addressing a lack of administrative capacities related to public investment (OECD 2020b).

THE PLANNED PUBLIC INVESTMENT PUSH

The new coalition government promises to change all this and has called for a "decade of investment into the future," to be fueled by much higher public investment. The "coalition treaty" (*Koalitionsvertrag*),[7] which provides the basis of operations for the new government and was issued by the three governing coalition parties in late November 2021, paints a vision of Germany's rapid investment-led modernization. Specifically, the investment decade is to focus on cli-

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[1] See, for example, Roth and Wolff (2018), Spiegel (2013), or Dullien et al. (2020). Similarly, Hellwig (2021) provides some stark indicators of such bottlenecks: for example, traffic congestions, measured in kilometers of traffic jams, increased fivefold during 2002–2018. Also, in a 2018 survey by Institut der Deutschen Wirtschaft, 72 percent of the companies surveyed indicated that deficits in Germany's road infrastructure had an adverse impact on business processes, up from 64 percent in 2013.

[2] Germany's public investment (i.e., public gross fixed capital formation plus transfers to public enterprises by all levels of government) has remined well below its key European partners for the last two decades. While most EU countries have maintained public investment in the range of 3–4 percentage points of GDP, in Germany it has been hovering around 2 percent of GDP. The situation is particularly dire at the municipal level, where public net fixed capital formation has been negative for almost two decades. See OECD (2020), country data retrieved from https://data.europa.eu (2021), Fuentes Hutfilter et al. (2016), or Hüther and Jung (2021).

[3] For example, the 2021 "Digital Riser" Report (European Center for Digital Competitiveness 2021) sees Germany in second-to-last place in Europe in the area of digitalization and in third-to-last place among its G20 peers. Similarly, the OECD's Digital Government Index (2020a) sees Germany well below the OECD average.

[4] See Expert Commission Report (2015) or BMWi (2020).

[5] An example is the still recent introduction of a mandatory e-procurement system for all public supply and service contracts awarded by federal authorities and, increasingly, at the state level.

[6] See OECD (2020b), IMF (2021a), or Fuest (2021), which advised to frontload public investment and speed up planning and approval processes for investments, much along the lines of the Koalitionsvertrag (2021).

[7] See Koalitionsvertrag (2021).

mate protection, digitalization, education & research as well as infrastructure. Public investment is to remain the key avenue for achieving this, and the *Koalitionsvertrag* offers significant additional resources for different sectors. On climate change, for example, it calls for an "instant program" (*Sofortprogramm*) to support adaptation measures in different sectors (including traffic, construction and housing, energy, industry, and agriculture). More generally, it promises to make sufficient financial resources available for the federal and state levels to foster climate adaptation measures and for the municipalities to strengthen investments in climate resilience.[8] The *Koalitionsvertrag* also aims to quickly put in place (i.e., in the first year of the new administration) all decisions to allow for a "fast, efficient, and goal oriented" implementation of investments (public or private) and, more specifically, promises to cut by "at least half" the duration of investment-related administrative processes and procedures.

The public investment push is to be achieved while keeping the existing fiscal anchors in place. Like its predecessors, the new coalition government views Germany as Europe's "stability anchor" and is keen to safeguard the country's European leadership in terms of "financial solidity." The government debt brake (*Schuldenbremse*), which has been guiding fiscal policy making in Germany since 2011 and has helped to keep a lid on spending (including public investment), is viewed as the main tool for this.[9] Hence, the *Koalitionsvertrag* promises to reinstate the *Schuldenbremse* as of 2023. Indeed, Germany achieved a remarkable reduction of government debt prior to the Covid-19 pandemic, bringing it down from about 81 percent of GDP in 2010 to 59 percent in 2019. This is in sharp contrast to some other EU countries: France and Germany, for example, had broadly similar government debt ratios until about 2010, but, by 2019, France's government debt had ballooned to 98 percent of GDP. Germany's debt reduction owes much to the *Schuldenbremse* and the resulting budgetary restraint (including in terms of public investment and military spending), although it was also facilitated by low interest rates and a strong growth in tax revenues.

Also, there are no new taxes or tax increases on the horizon to facilitate a public investment push, and, if anything, the *Koalitionsvertrag* promises various forms of new tax relief. New wealth taxes (*Substanzsteuern*) or major tax increases (except, perhaps, for selected engine fuels) do not feature in the agenda of the new government. To the contrary: the *Koalitionsvertrag* envisions various forms of new tax relief, including via a "super deduction" (*Superabschreibung*) for climate- or digitalization-related investments by firms; slower-than-planned increases in pension taxation; and higher tax allowances for education & training as well as for personal savings. As a result, the new government seems to pin its hopes for additional tax revenue on "a more intensive fight" against tax evasion and tax avoidance as well as more oversight of corporate tax planning, supported by a better digitalization of the tax administration and a simplification of the personal and corporate income tax systems.

Similarly, there are no concrete spending cuts planned to make room for the planned increase in public investment. The *Koalitionsvertrag* includes a general reference to expenditure cuts and reductions in unused expenditure allocations to increase the budgetary space for future-oriented investments. It is not clear, however, where this could come from: apart from a commitment to increase fiscal space by reducing subsidies and expenditures that are "superfluous, ineffective, and harmful to the environment and climate," the *Koalitionsvertrag* is silent on specific policy actions to reduce spending. Instead, the new government seems to rely mainly on strengthening fiscal management and transparency, including by introducing performance budgeting ("to assess the effectiveness and efficiency of policies and create additional fiscal space") and putting in place a federal asset registry.

FOREBODING FISCAL DILEMMAS ...

By and large, it is unlikely that a major public investment push can be pulled off based on the "doing the same but much better than before" approach that is set out in the *Koalitionsvertrag*. Government budgets in most advanced economies have been suffering increasingly from "social dominance" (Schuknecht and Zemanek 2018), where rapidly growing social expenditures (e.g., for health care and pensions) in the wake of an accelerating trend of population aging and the high political costs of reforming social spending have resulted in a dramatically reduced space for discretionary spending. This is also true for Germany, where federal social spending has increased by about 4.5 percentage points of GDP over the last 30 years.[10] To a large extent this has come at the expense of discretionary spending, particularly public investment, and, with no end to population aging in sight, it is unrealistic to find enough wasteful federal discretionary spending to make room for additional investment spending. Similarly, improving tax collection will, at least initially, cost much more money than it brings in, since tax administrations need to be strengthened before any additional revenues can be collected.

[8] The overall investment program is large, amounting to at least 1.3 percentage points of GDP annually, although it falls short of the estimated 2.5 percentage points of GDP in investments that would be needed to achieve the governments climate-related goals alone (Krebs and Steitz 2021 and Krebs et al. 2021).

[9] The *Schuldenbremse*, which is part of Germany's basic law (*Grundgesetz)*, has been suspended for 2020–2022. Put in place again as of 2023, as the *Koalitionsvertrag* promises, it would limit net borrowing (*Nettokreditaufnahme)* by the federal level (Bund) to 0.35 percentage points of GDP and prevent the states (Länder) from any net borrowing.

[10] See OECD Social Spending Data Base (https://www.oecd.org/social/expenditure.htm) and OECD (2020c).

This suggests that achieving a rapid investment-led modernization of Germany would either require abandoning or circumventing some of the fiscal commitments of the *Koalitionsvertrag*. With higher taxes and more government debt off the table, and no obvious low-hanging fruits for large spending cuts, it is unclear where the additional financial resources for an investment-led modernization can come from. Even though there seems ample spare for increasing the efficiency and effectiveness of existing investment spending, this will take time.

For now, the new government has started to exploit the budgetary instruments readily at its disposal. It fully understands the dilemma it faces in pulling off a public investment push within the fiscal confines it has set for itself and has embarked on using all existing borrowing appropriations ahead of 2023, when the debt brake will bite again. As one of its first actions, it re-appropriated for use in 2022 and beyond, unused 2021 borrowing authorizations related to the Covid-19 pandemic, amounting to 60 billion euros (1.7 percentage points of GDP), which it will park in an extrabudgetary vehicle, a reshaped "Climate and Transformation Fund" (KTF), previously known as the "Energy and Climate Fund" (EKF).

The new government has also indicated it will circumvent its budgetary confines by relying more heavily on existing extrabudgetary tools. This includes both permanent and ad-hoc mechanisms. The *Kreditanstalt für Wiederaufbau* (KfW), a fully state-owned bank, features particularly large in the new government's agenda: it is to become more of an "innovation and investment agency;" a major "co-risk capital provider" for the private sector ("particularly for artificial intelligence, quantum technology, hydrogen, medicine, sustainable mobility, bio economy, and circular economy"); a provider of financial support for private-sector climate adaptation measures (e.g., against flooding) and for "age-appropriate living" and "barrier reductions"; a more prominent provider of financing for buying shares in cooperative housing projects; and the steward of a new "Transformation Fund" to achieve climate neutrality. In this context, the new government has also indicated that it will strengthen the KfW's own capital base. In addition, the new government will also continue the previous government's provision of ad-hoc support to enterprises, particularly via its large (600 billion euros) economic stabilization fund (*Wirtschaftsstabilisierungsfonds*, *WSF*)[11] that was created in 2020 in the context of the Covid-19 pandemic to offer capital injections and guarantees to companies. Accordingly, in January 2022, it agreed to provide to a large retail chain new net resources amounting to 0.2 billion euros.

It can be argued that heavy reliance on the KfW to help fuel the government's investment and modernization agenda risks overloading the agency and lacks credibility. While Germany is no stranger to institutional innovation and financial engineering to pursue public policy objectives, recent undertakings have been timid: apart from ad-hoc decisions, like the creation of the *WSF* in 2020, Germany has largely avoided financial innovation to create fiscal space for public investment. There are no large public special purpose vehicles along the lines of Austria's ASFINAG[12] that are provided with their own non-tax financial resource base (in ASFINAG's case, road tolls); there is no dedicated infrastructure company or agency that could tap into private capital to finance public infrastructure[13] or be tasked with the development of platforms and frameworks to develop public infrastructure as an asset class to attract institutional investors; the new government has also explicitly ruled out a larger role for public-private partnerships (PPPs), confining these to selected single projects.[14] The *Koalitonsvertrag's* statement that "core responsibilities of the state are to be implemented and financed by the state" suggests that institutional or financial innovations are not necessarily in the making. One may ask: will the KfW really be able to do more things, on a much larger overall scale, and more effectively than possible alternative institutions? It seems that, without some further innovation, the government's public investment and modernization agenda seems unlikely to advance as planned.

Admittedly, the new government has little to build on when it comes to a domestic consensus on the financing framework needed to support its ambitious investment and modernization agenda. Most prominently, in 2020, a report by the Scientific Council of Germany's Ministry of Economics and Energy (BMWi) is long on discussing problems and reform needs related to public investments but short on offering new ideas or solutions for financing it. Specifically, the report offered three options for financing additional public investment: (i) introducing a Golden Rule (i.e., basically exempting public investment from the relevant fiscal constraints); (ii) defining a minimum level for public investment; and (iii) setting up investment promotion agencies (*Investitionsfördergesellschaften, IFGs*) that would enjoy selective exemptions from issuing debt (BMWi 2020 and Hellwig 2021). While the first two options were rightfully discarded, as they could easily be subject to manipulation, the report also poured cold

[11] See Bundesrepublik Deutschland, Finanzagentur GmbH (2021).

[12] ASFINAG (*Autobahnen- und Schnellstraßen-Finanzierungs-Aktiengesellschaft*) is an independent public company that handles planning, construction, operations, and the collection of highway tolls under the general supervision of Austria's Transport Ministry (Nauschnigg 2015).

[13] Earlier proposals (in 2016–2017) to create an *Infrastrukturgesellschaft* would have been like Austria's ASFINAG, except that it would have been allowed to issue debt to fund itself rather than having an own non-debt resource base like ASFINAG. These proposals have not been pursued further.

[14] In 2016, about 50 percent of all public authorities surveyed indicated high reservations against PPPs (Hammerschmid et al. 2016). This is unlikely to have changed much since. With administrative structures that are not supportive of PPPs, a policy to foster PPPs would also have to overcome major administrative obstacles.

water over the third option.[15] It suggested to consider IFGs in the form of specialized government agencies, i.e., fully funded by the government and unable to create additional fiscal space either by issuing debt or attracting private capital.[16]

Whatever form the financing mechanisms and institutions for a major public investment push will ultimately take, they will require assuming new fiscal risks, and discussions on these have not even started. All forms of fiscal additionality, budgetary or extrabudgetary, entail additional fiscal risks. Many of these risks come in the form of contingent liabilities that may (or may not) turn into actual liabilities for the government. For example, what is the likelihood that a government guarantee will be called? The real question to be asked is how much fiscal additionality is the government willing to provide, for what purpose and in what form, and at what additional fiscal risk? To date, notions of fiscal risk have been absent from discussions on increasing public investment in Germany. Yet, getting a better handle on fiscal risks is crucial: ultimately, the new government's ability to identify, analyze, manage, and disclose the fiscal risks that will accompany its ambitious public investment push will be a key element in determining its success or failure.

... AND MISSING INSTITUTIONAL DIMENSIONS

To implement its planned investment push, the new government will not only need to come to grips with its fiscal dilemmas but also with Germany's large public investment governance deficits. Public investments have frequently faced major cost overruns that are largest in the information & communications technology sector (131 percent) and smallest in the transport sector (32 percent) – see Kostka and Anzinger (2016). While cost overruns in public infrastructure projects are common elsewhere as well – on average countries lose over one-third of the potential benefits from infrastructure investment due to inefficiencies (Baum et al. 2020) – Germany seems particularly ill-prepared for a major increase in investment spending. It lacks a multi-year public investment plan to set out a clear national vision and has no institutional framework in place that would ensure implementation of such a vision. Instead, Germany's investment institutions in all stages of the investment process (planning, allocation, financing, and implementation) are fragmented across different levels of government and sectors, sometimes non-existent, and often under-resourced.[17]

[15] The Council report argues that "outsourcing expenses from the core federal budget would contradict the principles of transparency and budget unity" and goes on to state that, "if debt-financing of the activities of the IFGs was to be viewed as desirable, national and European fiscal rules should be changed instead of trying to circumvent the existing rules by diverting from fundamental budget principles" (BMWi 2020).

[16] That is, the advantages of the IFGs would mostly be non-financial, as discussed by Hellwig (2021), and go more in the direction of being "centers of competence" that could help to improve governance.

17 See Anheier et al. (2016) for details.

These governance deficits are likely to become even more apparent as public investments are scaled up; they should be addressed with some urgency. The new government could start by putting in place a permanent body to oversee and support the governance reform process. This could either take the form of a government agency like an IFG (as a center of competence without own budgetary powers but fully financed by the federal budget) or as a permanent advisory body within its Council of Economic Advisors (*Sachverständigenrat*) that would be tasked with making recommendations to the government. There is no absence of proposals for strengthening Germany's investment institutions.[18] A good way to get the ball rolling again would be with an independent assessment – the prime candidate of which would the IMF's "Public Investment Management Assessment" (PIMA), a comparative framework for assessing public investment governance that has been applied by almost 70 countries worldwide, including many advanced economies, to improve their relevant public institutions (see IMF 2021b or Schwartz et al. 2020). Strengthening investment governance would help make public investment more efficient and effective, without which the resources dedicated to the country's public investment-led modernization would be wasted in part.

CONCLSIONS

Will Germany's new coalition government be able to pull off its planned public investment push and create a decade of investment into the future? This article suggests that it may, but not without solving its foreboding fiscal dilemmas and tackling the country's public investment governance deficits in a decisive fashion. This requires a more comprehensive approach than what the new government currently seems to have in mind, one that combines innovations in infrastructure financing with a clear accounting of fiscal risks and significant reforms in public investment governance. Without these, that is, without trying out new ways for doing old things, Germany's public investment push will likely fizzle out and the decade of investment into the future would become a missed opportunity.

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[18] See Expert Commission Report (2015) or Anheier et al. (2016), or the more recent proposal by the Scientific Council of the BMWi (2020), as also discussed by Hellwig (2021).

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