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The Sweden Ticket

An overview of the “German Ticket” and possibilities for a similar ticket in Sweden

Hagemann, Johannes; Johansson, Michael

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PO Box 117
221 00 Lund
+46 46-222 00 00

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GRÖNA MOBILISTER

The Sweden Ticket

An overview of the“German Ticket”and possibilities for a similar ticket in Sweden

Johannes Hagemann and Michael Johansson

LUND UNIVERSITY

Green Mobilists is one of Sweden's leading advocates for sustainable and safer transport. Founded in 1994 with the support of the Swedish Society for Nature Conservation and WWF (World Wide Fund for Nature), the non-governmental organisation has since been a driving force in promoting greener mobility. Today, Green Mobilists strives for such things as a better, more affordable public transport; sustainable urban planning; a behavioral change to reduce car dependency; and a vision of zero traffic fatalities.

Abstract

This paper examines the impact of Germany's 9-Euro-Ticket and its successor, the German Ticket (49 €), on public transportation usage, environmental benefits, and social equity, while exploring the feasibility of implementing a similar model in Sweden. The 9-Euro-Ticket, introduced in 2022 as a temporary measure to alleviate economic strain from rising energy costs, significantly increased public transport ridership by 42%, reduced car usage by 16%, and saved 4.2–6.5 million tons of CO_2 emissions. Despite its success, the ticket disproportionately benefited higher-income groups and urban areas, underscoring infrastructure gaps in rural regions. The transition to the 49 € German Ticket maintained positive effects, with 14 million users by 2024, demonstrating sustained demand.

Economically, the German Ticket generated a net benefit of at least 3 billion euros for society. This includes savings from reduced car traffic (2.37–3.69 billion €), lower CO_2-related damages (1.3–2 billion €), and a subsidy effect where users saved more than the state spent on compensation for transport providers. Dynamic effects, such as 1.34 million users considering car ownership unnecessary, further amplified long-term economic and environmental gains.

For Sweden, Germany's experience highlights the potential of affordable, unified public transport tickets to boost sustainability and equity. Key takeaways include the importance of stakeholder coordination, targeted rural investments, and pilot projects to assess feasibility. The success of Germany's model suggests that similar initiatives could drive meaningful change in Sweden's transport sector.

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List of abbreviations and German terms

CO_2e	Carbon dioxide equivalents
DB	German Railway (German: Deutsche Bahn)
FDP	Free Democratic Party (German: Freie Demokratische Partei)
GHG	Greenhouse Gas
LNG	liquified natural gas
ÖPNV	Local public transportation such as subways and buses (German: Öffentlicher Personen Nah Verkehr)
SJ	Swedish State Railways (Swedish: Statens Järnvägar)
SPD	Social Democratic Party (German: Sozialdemokratische Partei Deutschlands)

1 Introduction

While the economic effects of the covid pandemic were still being felt, the Russian invasion of Ukraine dealt a second blow to the German economy, which was still heavily dependent on Russian gas in 2022. This brutal invasion not only cost the lives of many Ukrainians, but also affected the European political and financial spheres in many different ways. With gas prices peaking at three time the cost of 2021,[1] many people in Germany complained that the government should intervene to solve this problem. The German government, consisting of the Social Democratic Party (SPD), the Green Party, and the Free Democratic Party (FDP) enacted a series of measures aimed at securing the country's energy supply. Three of the most prominent measures were the gas price cap,[2] the switch to liquefied natural gas (LNG), which is still criticized by environmental activists,[3] and the so-called 9-Euro-Ticket. The idea was simple: A one-month ticket that costs 9 € and can be used on any regional train in Germany. The project was meant to be a large-scale test and the time was limited to a three-month period – from June to August 2022.

The ticket has generated a lot of interest, of people who commute to work every day, people who would like to visit friends or family more often and people who have planned an entire vacation around the chance to travel across the whole of Germany for 9 €.[4]

The 9-Euro-Ticket made international headlines and was widely discussed in terms of its social, economic and environmental impact.[5] Many experts and politicians were skeptical about whether this ticket could be implemented and, if so, whether it would have a positive impact on society or just be a financial disaster for the state. Economists and politicians from other countries followed the 9-Euro-Ticket with great interest, to see if a ticket like this could improve the public transport usage.

This paper examines the effects of the 9-Euro-Ticket, the transition to the subsequent German ticket, and the possibility of introducing a similar ticket in Sweden.

1 Südwest Presse (2022, 12. Oktober). Gaspreise aktuell: Stabilisiert sich der Gaspreis jetzt?

2 Bundesregierung. (2024, 1. Januar). *Preisbremsen für Strom und Gas*

3 NABU. (w. D.) *LNG: Neue fossile Abhängigkeiten in der Klimakrise*

4 Welt (2022, 19. Juni). 9-Euro-Ticket: „Wir wären sonst niemals auf die Idee gekommen, nach Sylt zu fahren"

5 Connolly, K. (2022, 29. Juni). Germany eases cost of living crisis with 9 € a month public transport ticket

2 Problematization and Literature review

From the first day that the 9-euro ticket was announced, critics in the media questioned whether this huge subsidy for public transport tickets was appropriate and whether it would have long-term effects. The poor availability of buses and trains in rural areas could prevent some people from using public transport instead.[6] Skepticism about the effectiveness of the ticket in reducing GHG emissions persisted when the 9-Euro-Ticket was followed by the German ticket, which cost 49 €. The studies conducted to evaluate the German ticket differed in methodology and results, partly due to different commissioners and partly due to different time periods.

The study "Report: Fact Check Germany Ticket: A review of the empirical evidence" (published in German by the Ariadne Project) collected and compared the different survey results on the German ticket and added second-hand data such as mobile phone data and traffic counts. Its meta-analysis will be the basis for the chapter on data evaluation. This will be complemented by the book "Neue Mobilität – vom 9-Euro-Ticket zur Verkehrswende" (New Mobility – from the 9-Euro-Ticket to a Tuning Point in the Transport Sector), which was one of the first in-depth analyses of the social, economic and environmental impacts of the 9-Euro-Ticket.

Many effects of the 9-euro ticket and the German ticket were in a similar direction, but different in amplitude, related to the cost of the ticket. The main aim of this paper is not to propose a reasonable price for a nationwide ticket in Sweden, but to highlight the possibilities that such a ticket may or may not open up. For this reason, and because the financing is strongly influenced by political decisions between the country, counties and transport companies, the economics behind such a ticket will not be discussed in detail.

3 Data review of the 9-Euro-Ticket and German ticket

Before looking at the specific user data, some general aspects of the German ticket need to be considered. Some of these were a secondary goal of the implementation of a nationwide ticket, others may not have been a declared goal of the ticket at all. The most notable change was that the nationwide ticket finally solved the problem of having different providers and tickets when traveling across zones. For people traveling from one county to another, it was often a challenge to find the cheapest ticket that still covered the trip. During the period of the 9-Euro-Ticket, 31 percent of journeys took place out-

6 deutschlandfunkkultur.de. (27.04.2022). *Entlastung für hohe Energiepreise - Wie nachhaltig ist das 9-Euro-Ticket?*

side the regular validation zone.[7] According to the German Minister of Transport, Volker Wissing, the real innovation is not the price of 49 €, but the possibility to use any regional train or bus in the country, which is impressive considering that there are more than 60 providers in Germany.[8]

3.1 Effects and user data of the 9-Euro-Ticket

The implementation of the 9-Euro-Ticket was initially limited to three months in the summer of 2022. But apart from the financial help to the citizens, this short offer had another huge benefit – motivating people to overcome their prejudices and use public transport for the first time after the covid pandemic, or even for the first time at all. It's hard to know how many people would have bought a ticket in Germany if they hadn't had a 9-Euro-Ticket before, but in the media, in private and in the political sphere, the issue of affordable public transport was more prevalent than ever.

In 2022, the usual price for a monthly ticket in German cities was over 100 €, and even a daily ticket often cost more than 9 €. The key to high passenger numbers was that 9 € was so inexpensive that people who used the ticket just a few times a month were still better off than before. People who used public transport only once or twice a week tended to use their cars, as no ticket was sufficiently expensive (the same or less than a car) for this type of travel. This factor is particularly important for price management, because if the a (national) ticket costs more than five day passes, people are likely to stick to their cars for occasional trips.[9]

The 9-Euro-Ticket was also more beneficial for lower income households, pensioners or students who wanted to visit new places, try new things or take an affordable vacation.[10]

In addition to price, psychological preferences also play a role, such as the flat-rate bias, which means that people prefer the safer pricing methods when planning their budgets. This is due to an effect called Prospect Theory, which states that within irregular prices, higher costs are being felt more than low costs.[11,12] The self-motivation theory suggests

7 VDV - Die Verkehrsunternehmen. (29.08.2022) Bilanz 9-Euro-Ticket

8 Zeit Online (2023, 22. September). *ÖPNV: Volker Wissing fordert Zusammenlegung von Verkehrsverbünden*

9 Krämer, A. (2024). *New Mobility – vom 9-Euro-Ticket zur Verkehrswende?*

10 Idib.

11 Idib.

12 Kahneman D, Tversky A (1979) Prospect theory: An analysis of decision under risk

that people who want to use public transport more or drive less can use a monthly pass as motivation because they have already paid for it. So even if a monthly pass is not actually financially beneficial, they buy it to push themselves to archive a more sustainable lifestyle. Similarly, there is a risk of overestimating actual consumption. The data in the public transport section is too small to draw any valid conclusions about these psychological effects.[13]

As a direct result of the 9-Euro-Ticket, the number of people using public transport increased by 42% and the number using long-distance trains increased by 12%. Half of the users of the 9-Euro-Ticket said they used their car less. On the other hand, the use of bicycles decreased by 18 percent.[14]

When the first studies came out and more people expressed positive opinions about it, the general view (also in the media) changed to a more positive one. Then the number of tickets sold also increased, which could be due to a psychological change in behavior. Social influence by others or a change in their life situation, could also have had its impact.[15]

97% of people were aware of the 9-Euro-Ticket in the first month, which shows that the advertising and media coverage were sufficient.[16] 60% of all users were satisfied with their experience, although half of long-distance users complained about seating. Many travelers were willing to accept crowded train conditions for the low cost.[17] Therefore, train operators should consider adjusting a lower price when trains are fuller. Perhaps this means more or similar revenue due to more customers.

For 12% of people, the 9-Euro-Ticket was the reason for continuing to use public transport after the ticket expired. 30% of the people who started using public transport because of the ticket continued to use it. 52 million tickets were sold within three months.[18] Combined with job or other monthly tickets, the usage rate averaged 25-30

13 Krämer, A. (2024). *New Mobility – vom 9-Euro-Ticket zur Verkehrswende?*

14 Ibid.

15 Ibid.

16 Ibid.

17 Ibid.

18 VDV - Die Verkehrsunternehmen. (29.08.2022) Bilanz 9-Euro-Ticket

million users per month.[19] Due to this high usage, 3 months of 9-Euro-Tickets saved as much traffic as a year of speed limit.[20]

In rural areas, sales were only half as high as in cities. The main reason for this is poor coverage or a schedule that is too sparse.[21] Even between cities, there is a correlation between the size of the city and the number of people using the 9-Euro-Ticket. 57 percent of users come from cities with less than 100,000 inhabitants, but this is more or less proportional to the population distribution.[22] Since the reform of the Deutsche Bahn in 1994, a total of 5,100 kilometers of tracks have been decommissioned, mostly in rural areas where Deutsche Bahn felt it was not profitable enough to maintain them.[23] Now that public transportation is one of the central pieces in the fight against climate change, it has become more important, and the discussion about whether it should be profitable has resurfaced. The states are now looking for ways to reactivate some of these 5,100 kilometers of tracks.[24]

Mobility is a prerequisite for full participation in social life and social welfare. This is especially important for children, teenagers and seniors who cannot drive. In recent years, not only has the price of gas gone up, but so has the cost of getting a driver's license.[25] Compared to the existing Sozialticket, which low-income households can apply for, the 9-Euro-Ticket had no bureaucratic barriers and was easier to buy. With the price increase to 49 €, this subsidy effect has disappeared. 79% of the users of the 9-Euro-Ticket are in favor of a ticket similar to the 9-Euro-Ticket and would continue to use it. Up to a price of 29 €, most people still view the ticket positively and as cheap, but with a higher price this positive view decreases drastically.[26] Affordable public transport is important for social balance and will become increasingly important in the fight against climate change in many countries around the world.

The 9-Euro-Ticket was used over-proportionally by young people (under 29) with high incomes. Only 34% of ticket holders were from lower income households (<2000 €),

19 Krämer, A. (2024). *New Mobility – vom 9-Euro-Ticket zur Verkehrswende?*

20 VDV - Die Verkehrsunternehmen. (29.08.2022) Bilanz 9-Euro-Ticket

21 Ibid.

22 Krämer, A. (2024). *New Mobility – vom 9-Euro-Ticket zur Verkehrswende?*

23 MDR (2024, 22. Januar). Übersicht: Welche Bahnstrecken in Mitteldeutschland reaktiviert werden sollen.

24 Ibid.

25 Tagesschau (2025, 8. April). Preise für Führerscheine erneut stark gestiegen

26 Krämer, A. (2024). *New Mobility – vom 9-Euro-Ticket zur Verkehrswende?*

compared to 36% of the population earning that much. The group of people earning more than 3000 € represents 38% of the population, but 42% of the ticket holders, so they bought the ticket relatively more often. Thus, even at the price of 9 €, the ticket wasn't bought mainly by people with low incomes, which limits the argument of social relief.[27]

3.2 User numbers of the German ticket

The Ariadne Report of the Kopernikus Project compared the four most scientific studies on the German ticket to evaluate their results. The aim was to find out why some studies differ and to develop a consensus that could be proposed to leading politicians. In addition to the surveys already conducted, anonymized phone data from the provider O2 was analyzed to find out how much people move in general. This was done to find out whether the 9-Euro-Ticket and the German ticket induced more travel overall, or whether the higher passenger numbers came from people switching from car to train.[28] One study quantified the induced rail traffic due to the tickets at 29%, of which 13% was from car users. The three other studies, and similar mobility policy changes in other countries, concluded that a rate of 5-10% of induced rail traffic seemed more realistic. Therefore, the researcher wanted to find out if there was a spike in movement visible in the phone data, which could indicate that the population was simply traveling more in general. By comparing the total number of trips and distance during the ticket periods, it was clear that there was no or very little increase in travel and that the 29 percent increase was probably due to a suboptimal survey design.[29] Another reason could be that surveys are not always very accurate, especially when asking people about their habits over a long period of time. Therefore, combining them with a real life analysis can prove or doubt the result.

Out of 100 trips with a ticket in Germany, 79 would have been made by public transport anyway, 5 would not have been made without the ticket, and 16 would have been made by car. These substituted trips are on average 30km long, which is longer than a normal trip using public transport. It is also important to note that only 1-2% of people would have cycled and 1-4% would have walked the distance.[30] Researching these undesirable

27 Krämer, A. (2024). *New Mobility – vom 9-Euro-Ticket zur Verkehrswende?*

28 Ibid.

29 Ibid.

30 Nicolas Koch et al (2025): Ariadne-Report: Faktencheck Deutschlandticket: Eine Bestandsaufnahme der empirischen Evidenz, p. 12

effects can sometimes be tricky, because in the case of walking and cycling, there is no good way to measure them other than by surveying German ticket users.

The total number of users was 9 million in May 2023 and increased to 14 million in December 2024. This increase is significant and has not been researched enough to give a factual answer as to why it happened. It is plausible that the same effects of behavioral change took place as with the 9-Euro-Ticket (as explained in chapter 3.1). Another reason could be that, in contrast to the 9-Euro-Ticket, people were skeptical about the price and whether it would be worth it to buy the subscription ticket. This theory could fit, as a study conducted in December 2024 found that 53% of German ticket holders had never owned a season ticket before.[31]

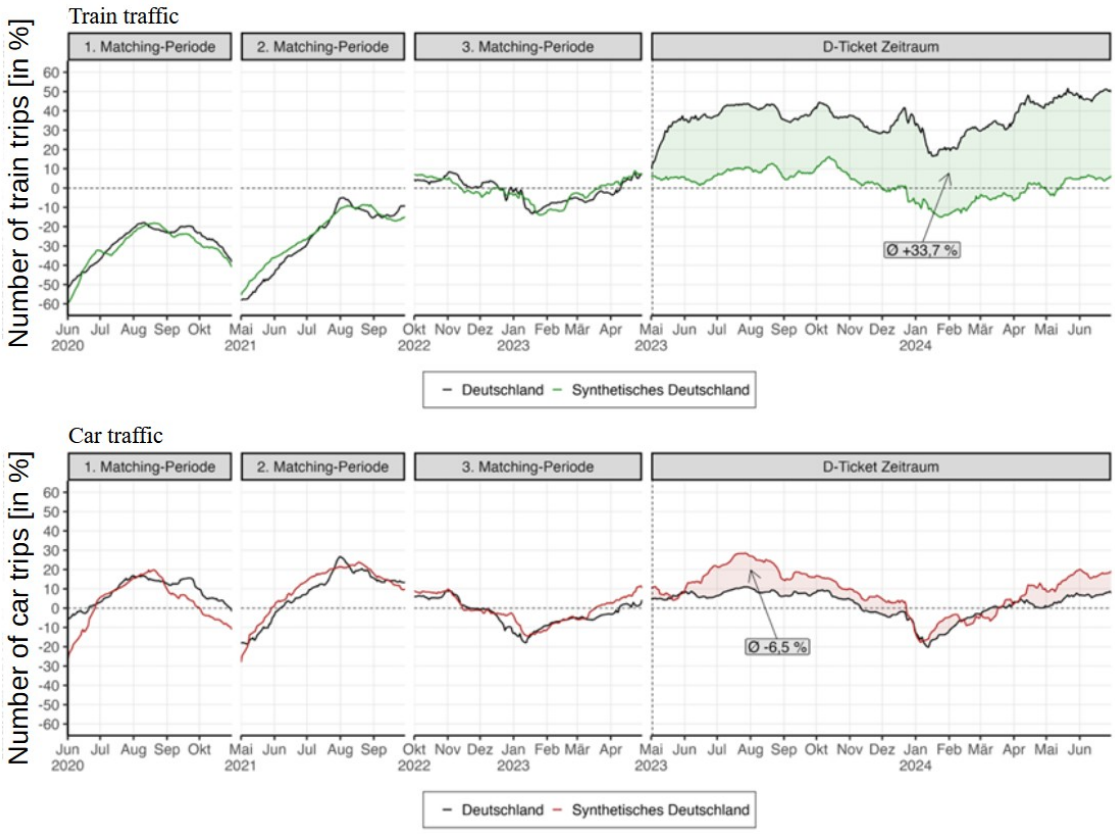
Because the covid pandemic changed a lot of transportation habits, and because after covid some people still had changed habits (such as working more from home or being less social), comparing pre-covid data with post-covid data to see the effects of the 9-Euro-Ticket and the German ticket is not completely reliable. Instead, experts use a method called synthetic control group.[32] Due to the similarities between European countries in their consumption patterns, fiscal policies, and laws, it is possible to create a synthetic Germany out of different European regions/countries. Essentially, this means looking at districts outside of Germany, selecting them correctly, and then comparing them to Germany as a whole. So to get the right averages of age, income, population density, public transportation coverage, etc., different regions (in this case from Italy) are calculated together. Often it is also necessary to balance them by multiplication to get similar numbers and statistics. To use this method correctly, it is very important to check the similarity over a longer period of time or over several seasons (as shown in Figure 1) to see if the synthetic Germany is close to the real development in Germany. In this case, the mobile phone data of millions of people in Germany and Italy were analyzed. If the synthetic Germany matches the original one in all seasons and shows the same trends, it is safe to say that the same would be the case in the period of the German map. Of course, the districts built into the synthetic Germany must be checked for major political, financial, or legal changes that did not take place in Germany at the same time. Ideally, the number of districts is large enough to make ticket price changes in a single district insignificant. In the Italian districts selected for Figure 1, there were

31 Krämer et al (2025): Deutschlandticket zum Preis von 29 Euro - Ticketbestand, Einnahmenwirkung und Ver kehrsverlagerung

32 Abadie, A. (2021). Using Synthetic Controls: Feasibility, Data Requirements, and Methodological Aspects

no changes that would suggest a different trend than in the comparison periods. When this comparison is made over a period of more than one year, an average increase of 33.7% in the number of train journeys can be observed. Due to the method used, only distances over 30 km were counted, because for shorter distances there are too many other mobility options that can't be identified.[33]

Figure 1: Train and car traffic compared to a synthetic Germany



Source [originally German]: Nicolas Koch et al (2025): Ariadne-Report: Faktencheck Deutschlandticket: Eine Bestandsaufnahme der empirischen Evidenz, p. 12

3.3 Mobility choices

36% of people over the age of 18 commute two kilometers or more to work. This means that 13.9 million people have to use some form of transportation about five times a week. 27% of them have the German Ticket and use it regularly to get to work.[34] This is

33 Nicolas Koch et al (2025): Ariadne-Report: Faktencheck Deutschlandticket: Eine Bestandsaufnahme der empirischen Evidenz, p. 12

34 Nicolas Koch et al (2025): Ariadne-Report: Faktencheck Deutschlandticket: Eine Bestandsaufnahme der empirischen Evidenz, p. 19

considerably higher than the 14% that a previous study found in 2020.[35] It is unclear whether this doubling of public transport users is solely due to the German ticket and should be investigated further. Most commuters take the same route to work at about the same time, so figuring out how to diversify public transit options to meet their interests will be the best long-term option for reducing car traffic.

As mentioned in chapter 3.1, tickets were less attractive in rural areas. In cities with a good bus and train network, a cheaper ticket might double the number of passengers, but the goal should be to make public transport available to everyone. To archive a real shift in transportation, more innovative transit, such as on-demand buses, must be implemented across the country. If it is not possible to have a bus come every 20 to 30 minutes, then other flexible options such as car sharing need to be considered.

3.4 Traffic providers

Public transport is financed by ticket revenues and government funding. 70 percent is covered by tickets, but part of that 70 percent is subsidized by the state, for example when students or disabled people get cheaper tickets. The legal basis and financing of public transport is the responsibility of the 16 federal states, so they all have different laws and structures, which makes it very difficult to understand. The federal government funds public transportation with billions of euros according to complex criteria that have been criticized by experts as being too unmanageable.[36]

With the 9-Euro-Ticket, 70 percent said that the trains were too crowded and that the train system was not designed for that many people.[37] For those who used the ticket, this number is not shocking given the extremely crowded trains during rush hour. In some cases, the trains were so crowded that the police had to ask some passengers to get off so that the doors could close and the train could leave the station.[38] 10% of users criticized the performance of the trains (timetable, poor punctuality), partly due to the high number of users.[39]

35 Destatis, Statistisches Bundesamt (w. D.). Erwerbstätige nach Stellung im Beruf, Entfernung, Zeitaufwand und benutztem Verkehrsmittel für den Hinweg zur Arbeitsstätte 2020 in %

36 Mietzsch O (2023) Die Finanzierung des ÖPNV und die Einführung des Deutschlandtickets as mentioned in New mobility p55

37 Krämer, A. (2024). *New Mobility – vom 9-Euro-Ticket zur Verkehrswende?*

38 EXPRESS: 9-Euro-Ticket: Kölner Hauptbahnhof voll, Züge in Köln-Süd geräumt

39 Krämer, A. (2024). *New Mobility – vom 9-Euro-Ticket zur Verkehrswende?*

The biggest benefit for transit agencies is customer loyalty, which helps them plan better. If people have a subscription for a monthly pass that renews itself at the beginning of the month, the operator can be sure that, at the same price, the number of holders will be more or less the same, even if there are fluctuations. Before, there was a lot of uncertainty about how many people would buy a ticket, often related to unpredictable factors such as the weather. The benefit would be even greater with an annual ticket, but a monthly ticket is more attractive to users because they don't know what their travel habits will be in a few months. A great opportunity to optimize the timetable would be to evaluate the user data, now that most German tickets are digital. The data could be anonymized and collected when scanned at the ticket checkpoint to see how many people are traveling during peak hours and whether they are traveling across zones.[40]

To solve the problem that a national ticket is often purchased in a different zone than the one in which it is used, a compensation payment is needed between the ticket seller and the provider.[41] Calculating the amount of this equalization payment is a difficult task and requires good communication between local transport providers, regional authorities and federal states. One option would be to measure how much passenger-generated revenue the provider had (relatively) before the ticket and then calculate how much they should get. This would assume that ridership increased the same in each county. Another method is to measure the number of passengers now and distribute the financial support from the government accordingly. This does not take into account that in some districts the ticket is used more often due to better connections.

4 Cost and benefits of a nation wide ticket

The government decided to pay the amount of money that the transport companies theoretically lost because of the 9-Euro-Ticket. They paid a total of 2.5 billion euros[42] to the states, which distributed it to the providers. If the sum of 2.5 billion euros is divided by the 52 million tickets sold, the true price of the ticket can be estimated at around 48 euros.[43] This means that for every 9-Euro-Ticket, the government paid €39 in reparations to the states. The price of the German ticket was therefore initially set at 49 €. This

40 Krämer, A. (2024). *New Mobility – vom 9-Euro-Ticket zur Verkehrswende?*

41 Ibid.

42 Stuttgarter Zeitung (2022, 5. September). Wie viel hat das 9-Euro-Ticket den Bund gekostet?

43 Krämer, A. (2024). *New Mobility – vom 9-Euro-Ticket zur Verkehrswende?*

doesn't mean that the government doesn't subsidize the ticket anymore, but it's more to help the transport companies keep their business and invest in more infrastructure.

According to several studies, an estimated car reduction of 18.9-29.5 billion kilometers is realistic.[44] This distance corresponds to a saving of 4.2 to 6.5 million tons of CO_2e. According to the German Federal Environmental Agency, one ton of CO_2e causes a financial damage of 300 €. Therefore, the saving of CO_2e corresponds to a financial saving of 1.3 to 2 billion Euros.[45] But to calculate the real savings, other external costs of driving need to be quantified and priced. These are costs caused by car accidents, time lost in traffic jams, noise pollution, infrastructure construction, and more. In their Ariadne report, Nicolas Koch et al. calculated that one person driving one kilometer costs society 0.11 €. This amounts to a reduction of between 2.37 and 3.69 billion euros.[46] The third thing to consider when evaluating the German ticket in terms of its economic benefit to society is the subsidy effect. If the state has to spend a few billion euros to finance the ticket, but on the other hand the taxpayers save more money, then the ticket was a net gain for the country. In the case of the German ticket, the taxpayers saved about 3.1 billion euros by spending less on mobility, and the loss to the transport operator is about 2.9 billion euros, so if the loss were taken into account, the subsidy effect alone would have created a value of 200 million euros. These three types of benefits add up to a net gain of at least 3 billion euros for German society.[47]

The German ticket also has some dynamic effects that are too vague to calculate, but worth mentioning. A few months after the introduction of the German ticket, a survey estimated that out of 12.3 million users, 1.34 million were considering getting rid of their car because of the ticket.[48] When people realize that their car is unnecessary, they get rid of it, and the German ticket has had the effect of converting people from car drivers to non-drivers. Other dynamic effects are the capacity, which was insufficient with the 9-Euro-Ticket (as mentioned in chapter 3.4), but is still sufficient with 14 million German tickets sold.

44 Nicolas Koch et al (2025): Ariadne-Report: Faktencheck Deutschlandticket: Eine Bestandsaufnahme der empirischen Evidenz, p. 20

45 Ibid., p. 21

46 Ibid., p. 22

47 Nicolas Koch et al (2025): Ariadne-Report: Faktencheck Deutschlandticket: Eine Bestandsaufnahme der empirischen Evidenz, p. 22

48 Ibid., p. 22

5 Chances for an implementation in Sweden

In a number of ways, German and Swedish public transportation operators and authorities share common characteristics. In both Germany and Sweden, a significant number of administrative and strategic decisions are decentralized. Providers are responsible for the coverage of specific regions, proportional to the size of the respective cities or regions, and are accountable for all transportation activities within their designated areas.

Each of Sweden’s 21 regions has a Regional Public Transport Authority (e.g., SL in Stockholm, Skånetrafiken in Skåne). The Swedish Transport Administration (Trafikverket) manages infrastructure like railways and major roads. Svensk Kollektivtrafik is a national association that coordinates policy and knowledge-sharing among regional authorities. Public transport in Sweden is funded through a mix of sources such as for example regional taxes (funded by county/municipal taxes), ticket revenue (varies by region and ridership) and state grants/subsidies (mainly for infrastructure, rural access, and activities to reach climate goals).

Germany's experience with the 9-Euro Ticket and the German Ticket offers valuable insights into how affordable public transport options can be leveraged for broader social, environmental, and economic benefits. For Sweden, pursuing a similar model holds promise, particularly in addressing public transport disparities and enhancing environmental sustainability.

By learning from Germany's implementation strategies and outcomes, Swedish policymakers can craft tailored solutions that reflect both the unique characteristics of Sweden's transport landscape and the needs of its population. The prospect of a subsidized public transport ticket could mark a transformative step toward a more equitable and sustainable transport system in Sweden. Hence, a significant challenge in Sweden is, of course, the costs.

The Left Party had a motion 2023 about a “Sweden Ticket” like a National public transport pass that allows affordable and seamless travel across all regions of Sweden, inspired by Germany’s Deutschlandticket. For the cost of 450 Swedish kronor it would allow unlimited travel on regional buses, subways, commuter trains, and trams across the country. The motion emphasizes that the Swedish state should take financial responsibility for enabling a national ticket system. While the motion does not detail exact tax sources or budget reallocations, it implies that funding would be part of broader climate

and transport policy investments. According to them, the annual cost would be around 10 billion Swedish kronor (SEK) by 2024,[49] which equals roughly 1.85 million users per month.

Urban areas like Stockholm and Gothenburg benefit from more robust funding and infrastructure, while rural regions face underinvestment. Rising energy prices and inflation have increased operational costs, putting pressure on regional budgets.

It's important also to note that not everyone uses period tickets, making 10 billion SEK a convenient estimate. The reasoning behind this figure is perhaps also based on several assumptions and may underestimate costs for various reasons, including:

- The 10 billion SEK calculation is likely to be at the low end, as many other Regional Public Transport Authorities (RKM) have more expensive monthly tickets,
- Increased travel will necessitate higher service levels, leading to increased costs, and
- Measures that boost public transport use can enhance ticket revenues, but decreasing ticket prices by 50% would also reduce that revenue increase by a similar proportion i.e. 50%.

Moreover, the regions in Sweden cannot afford to spend 10-15 billion SEK on this; it must (or should) therefore come from state funds that needs to remain stable long-term in the national budget, which could of course be at risk of budget cuts. Svensk Kollektivtrafik have in past reports emphasized that frequency, reliability, and geographic coverage are key factors influencing satisfaction and usage and that price becomes a secondary concern once basic access needs (e.g., routes, schedules) are met.[50]

A practical example of this is that rising fuel prices post-pandemic, followed by drops in prices for private car users, which likely had a minimal impact on overall public transport usage. Data correlations between survey data (Kollbar) and traffic data (Flowmapper) from last year (2024) revealed that public transport actual “service hours” when in

49 Vänsterpartiet (2023) Motion Sverigebiljett 2023/24:2345 av Linda W Snecker m.fl. (V) https://www.riksdagen.se/sv/dokument-och-lagar/dokument/motion/sverigebiljett_hb022345/

50 Svensk kollektivtrafik (2023). Kollektivtrafikbarometern 2023 - Vem kan resa mer kollektivt?

operation seem more important than just having frequent service in the day i.e. the ability to travel during most hours of the day and week was key to success.

For more inexperienced travelers, a lack of knowledge about public transport and potential concerns about service disruptions may deter them from using it, in addition to actual service supply gaps during the day. If national government entities were to ensure the operational quality of infrastructure (roads and railways), it would likely yield greater societal benefits and reduce operational costs for public transport, which currently includes expenses for replacement services, driver salaries, and traveler compensation due to delays, costs that could instead go toward enhancing services of public transport.

Previous experiences evaluating regions with "free" public transport have shown that lowering fares or making public transport free does not primarily encourage car users to switch mode of transport but tends to benefit groups already inclined to use public transport.[51] Trials in cities like Avesta and Hässleholm have shown similar results, that instead of car usage it often replaces active modes like walking or cycling.

Public transport, like healthcare, is never truly "free of cost", it must be financed through public funds or user fees somewhere within the system. While subsidies can improve access and equity, they also raise questions about long-term sustainability and resource allocation. Similar to healthcare, where user fees are sometimes used to prevent overuse of non-essential services, public transport systems must balance affordability with efficient use of public resources.

It seems that, as in Sweden with government-sponsored summer tickets, the dialogue between state and regional authorities in Germany hasn't always been optimal. Short notice and changing conditions make it challenging for regions to adapt their offerings accordingly.

Ultimately, as long as there is no political will and corresponding funding, these initiatives are unlikely to fully materialize. If a political environment did support it, significant investment would be required which would also need to increase if travel demand rises to also meet that demand. The German Ticket, priced at €49, relies heavily on public funding while also aiming to increase ridership through lower prices.

51 Cats, O., Susilo, Y.O. & Reimal, T. (2027). The prospects of fare-free public transport: evidence from Tallinn. Transportation 44, 1083–1104 (2017). https://doi.org/10.1007/s11116-016-9695-5

Sweden also has a lower population density and larger rural areas than Germany. This makes it harder to provide frequent and reliable public transport outside major cities, potentially limiting the ticket's economical effectiveness in rural regions. While Germany has a mostly dense and integrated public transport network, Sweden's system is more fragmented, with regional operators and varying service levels. A unified ticket would require significant coordination and investment costs. Implementing such an economic program would require substantial government subsidies and political consensus, which may be difficult to secure at the moment.

Germany's offerings, while successful in boosting ridership temporarily, are part of a more complex discussion on long-term sustainability amid fluctuating taxes and public support, particularly as ongoing negotiations continue regarding the future of the German Ticket.

A key lesson that Swedish policymakers could gain from their German counterparts is not the design of the ticket or the price, but rather, the process of convening all relevant stakeholders and implementing such a project throughout the country within a few months of planning.

Prior to the implementation of such a ticket in Sweden, it would be advisable to consider the method of creating a synthetic Sweden from German regions. The data has already been collected and evaluated by German traffic experts. The raw data can be compiled to provide insight into the potential impact of the German ticket on traffic in Sweden during the same time period. Should the results prove to be favorable, the implementation of a modest lighthouse project within a designated area, comparable to the 9-euro ticket, might serve as an effective strategy to cultivate public interest in public transportation and to facilitate the process of overcoming preconceived notions.

6 Discussion

After taking a closer look at the 9-Euro-Ticket and the German ticket, it is safe to say that both tickets have been a success – not only for the users, but also for the operators and the governments. These tickets have managed to put public transport back in the spotlight after a sharp drop in ridership during the covid pandemic. Critical voices became silent after the first studies on the 9-Euro-Ticket were published and the argument that the tickets were too cheap was dismantled. Public transport was in the news, and although the headlines were mostly about overcrowded trains, many people and even

some providers saw this as a great opportunity to find out how many people were willing to use public transport. Of course there are many areas that could be improved, from the punctuality to comfort, but to address these issues the providers need more money to invest, which could be allocated by the government – if it has public support.

At 49 €, the German ticket has many positive effects, some environmental, such as the reduction in CO_2e, some social, such as the reduction in noise pollution, and also financial. Chapter 3.4 clearly shows that the current political discussion about whether the ticket is too cheap is not based on reliable statistics. In order to archive long-term effects, such as people getting rid of their cars, the German ticket needs to be a stable and affordable option. Increasing the price of the ticket comes with the great risk of losing some users. The current change to 58 €[52] has not yet been sufficiently analyzed, and with the change of government many people fear that the ticket will become even more expensive.

7 Conclusion

→ Both the 9-Euro-Ticket and the German ticket have positive effects on the environment, public transport attitudes and the German economy. Swedish politicians should look at the studies that have been carried out to see what a similar ticket could look like.

→ The 9-Euro-Ticket had a subsidy effect, but not, as expected, mainly on low-income households, but on all groups of people. Rural areas did not benefit from the ticket in the same way as larger cities. Therefore, a closer look at transport in rural areas is needed.

→ In the public transport sector, where improvements are usually small and slow, such a bold idea like the 9-Euro-Ticket has attracted a lot of interest and attention. Thinking big and developing a lighthouse project with the help of transport experts could potentially revolutionize public transport in Sweden and around the world.

52 Tagesschau (2024, 20. Dezember). Deutschlandticket wird neun Euro teurer.

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