

Do COVID certificates spur vaccination take-up? A snapshot of the recent evidence

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Many OECD countries are in the grip of a new surge of COVID infections, hospitalisations, and deaths despite no shortage in supply of highly effective vaccines, especially in protecting against severe forms of the disease (Milman et al., 2021). COVID certificates, certifying vaccination status or a negative test, have been under consideration in many countries and mandated in some as a condition for population to access certain social and professional gatherings. Arguments for and against supporting their adoption have focused on its contribution to reduce transmission and severe forms of disease as well as on ethical concerns (Phelan, 2020; Sleat, Innes and Parker, 2021). In this context, one question that arises is how effective are COVID certificates in raising vaccination rates. Early and casual observations suggest that it has had a significant impact, but a rigorous assessment is needed to address the question.

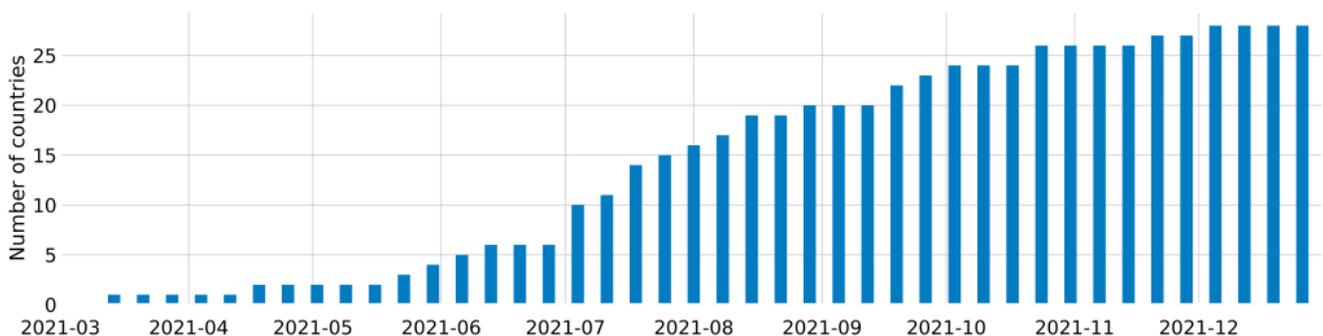
The adoption of COVID certificates has been swift across OECD countries, as 28 countries were requiring certificates from their citizens by the end of 2021 (Figure 1). The main features of COVID certificates vary across countries, not least in terms of scope and coverage. For instance, mandates can be required only in high-incidence areas (e.g. in Germany by the time of their introduction) or vary by region or occupation (e.g. Australia, Canada), whereas a large number of countries including France, Indonesia, Lithuania require COVID certificates to access most public facilities barring

essential shops.

COVID certificates also differ regarding their validity criterion. For example, “2G” regimes¹, which require immunity (through vaccination or recovery) are applied in contact-intensive services in Austria, in Italian public transport and will soon be implemented in France. More flexible “3G” certificates applied in Denmark, Estonia and Finland among others are also valid for individuals with a recent negative test. The stricter “2G+” criteria which requires both a proof of immunity and a negative test is applied for restaurants in Germany, Luxembourg and Switzerland. In a growing number of countries (including France, Greece, Lithuania or the Czech Republic) the validity of vaccination certificates will be reduced to 7-9 months after the primary vaccination with a booster shot required for renewal.

Early adopters include Israel², Denmark³ and Austria⁴. There has been an acceleration during the summer as 17 countries introduced COVID certificates, especially among EU countries where the implementation of domestic COVID certificates had been facilitated by the launch of the EU Digital COVID certificate on 1 July 2021. This acceleration coincided with a substantial increase in vaccine uptake: between the week prior to the implementation of the COVID certificate and a month after, vaccination rates increased by 8 p.p. on average across these 17 countries.

Figure 1. Adoption of COVID certificates across OECD countries



Note: Blue bars show the number of OECD countries which

implemented a COVID certificate. At the end of 2021, that includes 28 countries (Austria, Belgium, Bulgaria, Chile, Colombia, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Israel, Ireland, Italy, Korea, Latvia, Lithuania, Luxembourg, Mexico, Netherlands, Portugal, Slovak Republic, Slovenia, Spain, Turkey and the United States).

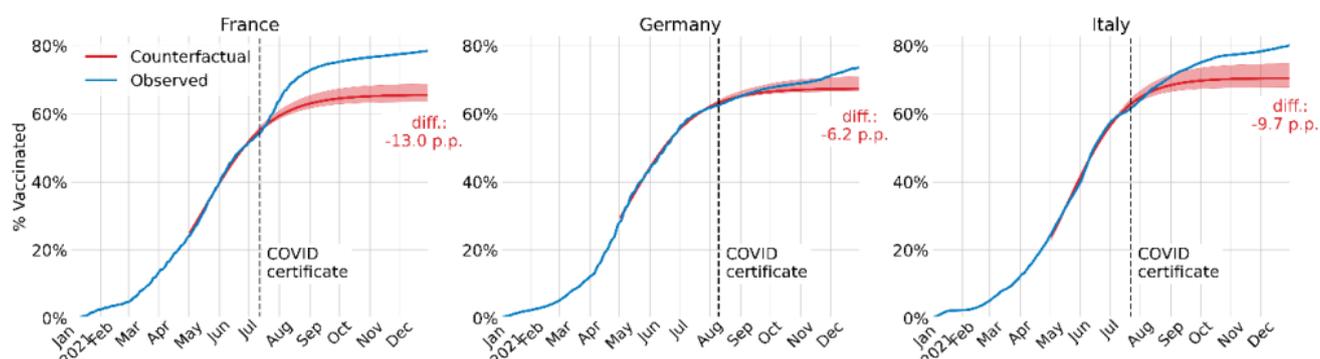
Source: Author's computations.

How much of this effect can be specifically attributed to certificates has yet to be conclusively analysed. Still, there is already substantial supporting evidence. First, qualitative or survey-based analyses for Lithuania (Walkowiak, Walkowiak and Walkowiak, 2021), Israel (Wilf-Miron, Myers and Saban, 2021), and Germany (Klüver et al., 2021) point to the fact that COVID certificates incentivise vaccination by granting vaccinated individuals additional freedoms. Second, a number of studies providing early quantitative evidence based on panel data econometrics have aimed at singling out the effect of COVID certificates on vaccination among other factors:

A recent focus by the Conseil d'Analyse Economique (Oliu-Barton, Pradeliski, Wołoszko et al., 2021) adds to this literature. It uses both a synthetic control approach and a model inspired from innovation diffusion theory to provide the following estimates of the gains in vaccination by the end of 2021 in the three largest EU countries from the implementation of COVID certificates: 13 p.p. in France, 6 p.p. in Germany, and 10 p.p. in Italy (Figure 2). Further, it broadens the scope of the analysis by providing an estimation of the health and economic benefits from the increased vaccination rates due to COVID certificates. First, it uses estimates of vaccine efficacy to quantify the number of lives saved due to higher vaccine rates (32% of COVID-related deaths in France, 5.6% in Germany, and 14% in Italy over the second half of 2021). Second, it resorts to an estimation of the elasticity between vaccination rates and weekly economic activity – computed using the OECD Weekly Tracker of GDP (Wołoszko, 2020) – in order to quantify the impact of COVID certificates on GDP. The

results suggest that by the end of the year, economic activity would have been lower by around a half percentage point in France and Italy and 0.3p.p. in Germany in the absence of the COVID certificates. Last, it argues that in France the COVID certificate may have been decisive to avoid reaching the high pressure on ICUs that prompted previous lockdowns.

Figure 2. Estimated vaccine uptake with and without COVID certificates



Note: The cumulative proportion of the whole population who received at least one COVID-19 vaccine dose in the actual intervention deployment (blue) and in the no-intervention counterfactual scenario (red). The counterfactual scenario is built via innovation diffusion theory and further validated by synthetic control. Black dashed vertical line is the date of the introduction of the COVID certificate.

Source: Olliu-Barton, Pradelski, Woloszko et al. (2021)

Based on these early analyses, a consensus seems to emerge that COVID certificates have had a significant and substantial impact on vaccine take-up, especially in France and Italy. However, this only explains a small part of the cross-country differences in vaccination rates. Overcoming vaccine hesitancy remains a big challenge facing policymakers in most countries at the turn of 2022, and more research is needed to better assess the potential role of other policy levers of vaccine uptake.

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[1] The « Gs » stand for the German « *geimpft, getestet, genesen* » (vaccinated, tested, recovered).

[2]
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[3]
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[4]
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