

The Nativity Wealth-Health Gradient: The Case of Norway

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Research Question

Our study aims to investigate the wealth-health gradient based on nativity in Norway. Specifically, we are interested in the following research questions: (1) Whether and to what extent the wealth-health association varies between the immigrant and native-born Norwegian populations?; (2) To what extent it differs by region of origin and reason for migration?

Theoretical Background

The ever-growing literature on immigrant economic assimilation has long been demonstrating that most immigrant groups arrive at their destination with lower income and employment rates but subsequently converge toward native levels the longer they stay in the host country (e.g., Borjas 1995; Chiswick 2005; Maskileyson & Semyonov 2017). Additionally, numerous studies have indicated that lower socioeconomic status is related to poor health in terms of both morbidity and mortality (e.g., Palloni & Arias, 2004). Consequently, given immigrant income assimilation and the socioeconomic health gradient (e.g., Kennedy et al., 2006), immigrants should become healthier the longer they live in the host country (Braveman, et al., 2010). Nevertheless, most of the research presents exactly the opposite relationship: immigrants arrive with better health than the native-born population but their health declines with increasing length of stay and generational status (e.g., Maskileyson, 2019). Notably, immigrant economic assimilation has received relatively little attention in the existing literature on health trajectories (Hossin, 2020). Therefore, the mechanisms underlying the socioeconomic status patterning of immigrants' health trajectories remain unclear, although several potential explanations exist.

The first group of explanations involves behavioral factors that may play a role in the socioeconomic stratification of health. Various studies have documented the socioeconomic gradient in dietary choices. For example, Goldman et al. (2006) suggest that poorer people in Mexico have better health outcomes as compared to people of higher socioeconomic status because they are simply unable to afford higher-calorie foods, cigarettes, or alcohol and are more likely to engage in exercise (through manual labor). A second group of studies speculates that psychosocial factors may account for the negative relationship between economic wellbeing and health. For example, perceptions of health status have been found to vary according to socioeconomic status (e.g., Paeratakul et al., 2002) in that persons of higher socioeconomic status are more sensitive to their self-perceived health status than lower-socioeconomic status groups (e.g., Sánchez-Vaznaugh et al., 2009). Finally, according to the acculturative stress hypothesis, the host society may view most of the immigrants as low-status groups, so immigrants face discrimination and racism which can cause chronic stress and an overall health decline despite the improvements in their socioeconomic status over time (e.g., Williams et al., 2010).

Combined, these explanations suggest considerable diversity in the socioeconomic patterning of health trajectories following immigration, highlighting the need for further investigations. Whereas the body of research on the income immigrant assimilation as well as on the association between economic resources and health has become substantial, wealth is understudied in health and the ethnic and migration studies literature. Following previous studies, we argue that wealth is a better proxy for an individual's economic standing than education, occupational status, or income. This is because wealth determines the cumulative and dynamic nature of economic well-being and potential consumption (e.g., Killewald et al., 2017; Semyonov & Lewin-Epstein, 2021). Moreover, it especially matters in the context of migration, because wealth is even more unevenly distributed between immigrants and natives

than income (e.g., Lewin-Epstein & Semyonov 2013; Agius Vallejo & Keister 2020). Norway, a recent immigrant-receiving nation with around 15% first-generation immigrants, grapples with a “Nordic paradox” (Diaz & Kumar, 2014). Despite low-income inequality and a robust welfare system, wealth inequality remains high, leading to significant socioeconomic health disparities. Health outcomes among immigrant groups vary, with some performing better than natives while others, particularly non-Western groups, face greater health challenges.

To the best of our knowledge, no one has yet studied the extent to which the association between wealth and health varies between immigrants and natives. The current study, therefore, aims to examine whether the wealth-health gradient varies by immigrant status and across immigrant groups of different origins and by reason for migration in the Norwegian context. Specifically, we distinguish between four regions of origin: Nordic, European, non-European, and Norwegians, as well as four reasons for migration: economic, educational, family reunion, and refugees. Notably, our data do not include information on the reason for migration for immigrants who came from Nordic countries. We contribute to the literature in the field of health inequality and migration by turning attention to the wealth holdings of immigrants and the nativity wealth-health gradient.

Data, Variables and Method

We use data from the Norwegian Population Register, the Norwegian Tax Register, and the KUHR register from the year 2017 for Norwegian registered residents aged 27 and older. The data virtually cover the entire Norwegian population. Our analytical sample includes 599,567 first-generation immigrants and 2,917,335 native-born individuals. Personal health status is the dependent variable in the current study, based on health diagnoses registered by a general practitioner during consultation. Information on wealth holdings was based on individual tax

reports. Wealth values were standardized to a percentile ranking scale, on which individuals are ranked according to their relative wealth.

In our Poisson regression models predicting health based on wealth, we incorporated interaction terms that included wealth, wealth squared, immigrant status, nativity status, and the reason for immigration. Additionally, we incorporated a correction factor to account for the likelihood of healthcare use based on migration background, as proposed by Diaz and Kumar (2014).

Preliminary results

Our findings, as depicted in Appendix 1a-1b, present a nuanced picture. Initially, we observed significant disparities for both wealth and health indicators. Native-born Norwegians appeared to be the wealthiest yet not necessarily the healthiest, while European Union (EU) and the European Economic Area (EEA) immigrants emerged as the healthiest but most economically disadvantaged group.

As we conducted a more in-depth analysis, incorporating additional variables, these nuances became more apparent. First, we estimate Poisson regression models predicting health by wealth, comparing Norwegian natives and the entire immigrant population. Among native Norwegians, wealth exhibited no gradient with health, indicating that wealth does not play a role in their health (see Figure 1). However, among immigrants, we uncovered a distinct inverse gradient, taking on a parabolic shape. This suggested that less wealthy individuals were more likely to face health challenges, with noticeable health improvements only occurring around the 80th percentile on the wealth rank scale.

Second, in order to better understand the effect of immigration, we compare the wealth-health gradient between each of the immigrant subgroups as defined by their region of origin and by reason for migration and the native-born population. Comparisons by region of birth unveiled

interesting patterns (see Figure 2), with Nordic immigrants mirroring the positive linear wealth-health relationship seen among native Norwegians, while EU/EEA immigrants showcased a parabolic gradient, signifying that increased wealth substantially benefited health primarily among the wealthiest individuals. In contrast, non-EU/EEA immigrants displayed an inverse gradient compared to natives, indicating that wealthier individuals experienced poorer health. Further stratifying our analysis by the reason for migration illuminated intriguing disparities (see Figure 3). Native Norwegians continued to demonstrate a weak wealth-health association. In contrast, economic immigrants and refugees displayed non-linear gradients, with health declining as wealth increased, but this trend reversed at higher percentiles of wealth.

Conclusions

In conclusion, our study challenges the assumption of a universal wealth-health relationship and highlights the intricate interplay of wealth, health, and immigration status. These disparities can be attributed to various factors such as the demands of specific occupations, experiences of discrimination, acculturative stress, and barriers to accessing healthcare.

These findings have significant implications for policy development and healthcare interventions, emphasizing the importance of tailored approaches to address the unique needs of different immigrant groups in Norway. Our research contributes valuable insights to the ongoing discourse on health disparities within immigrant populations and underscores the complexity of the factors at play.

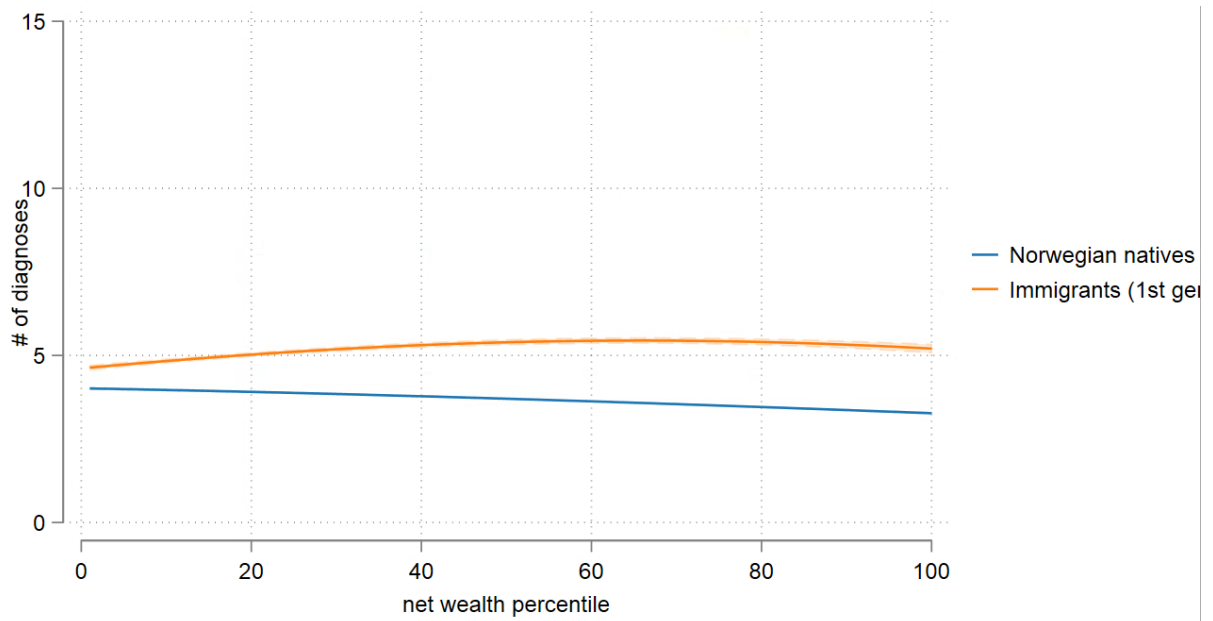
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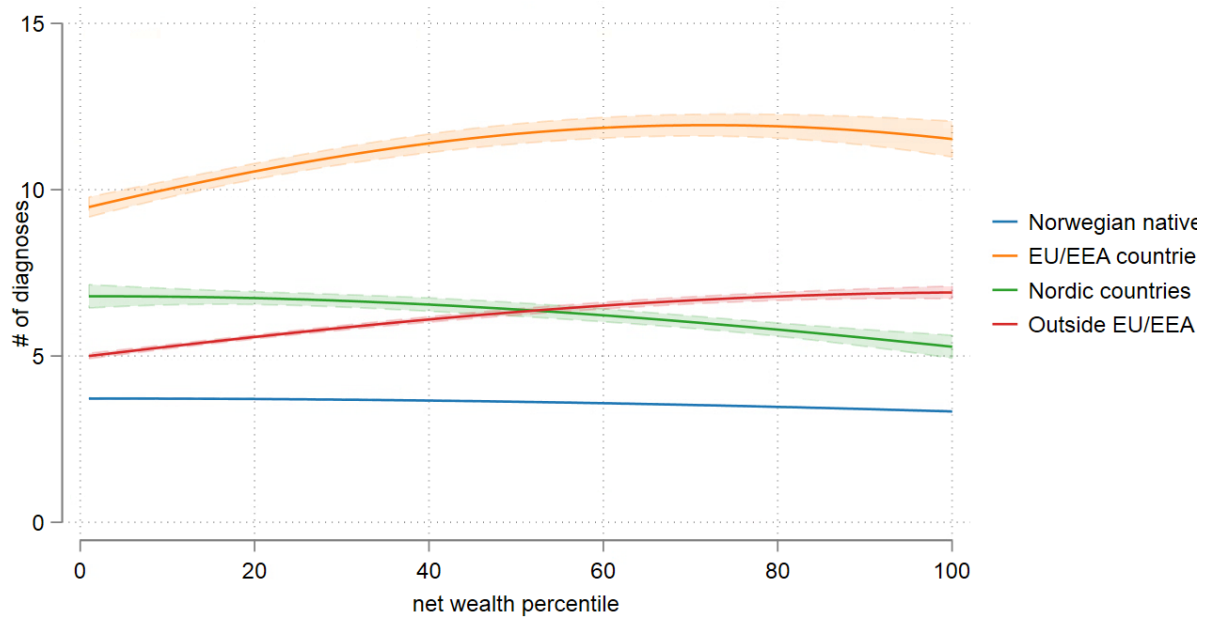
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Figure 1: Predictive number of diagnoses in 2017 over relative net wealth, by immigrant status.



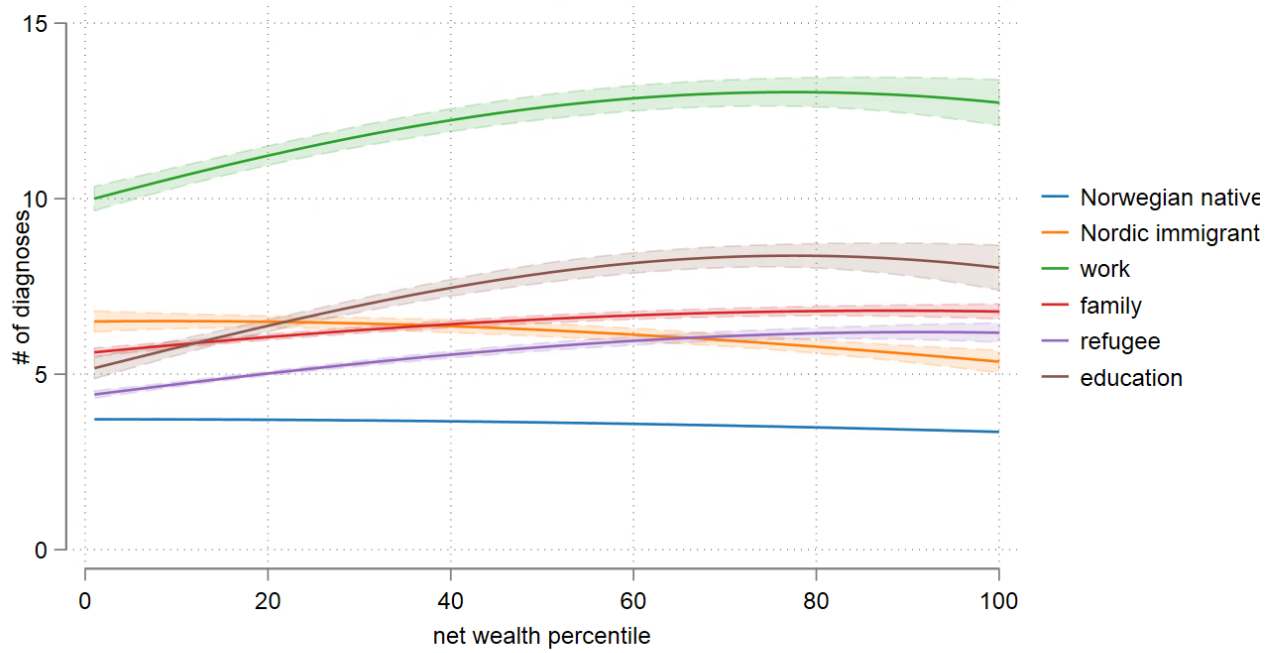
Notes: Based on Poisson regression including correction factor for likelihood of visiting the general practitioner.

Figure 2: Predictive number of diagnoses in 2017 over relative net wealth, by nativity status.



Notes: Based on Poisson regression including correction factor for likelihood of visiting the general practitioner.

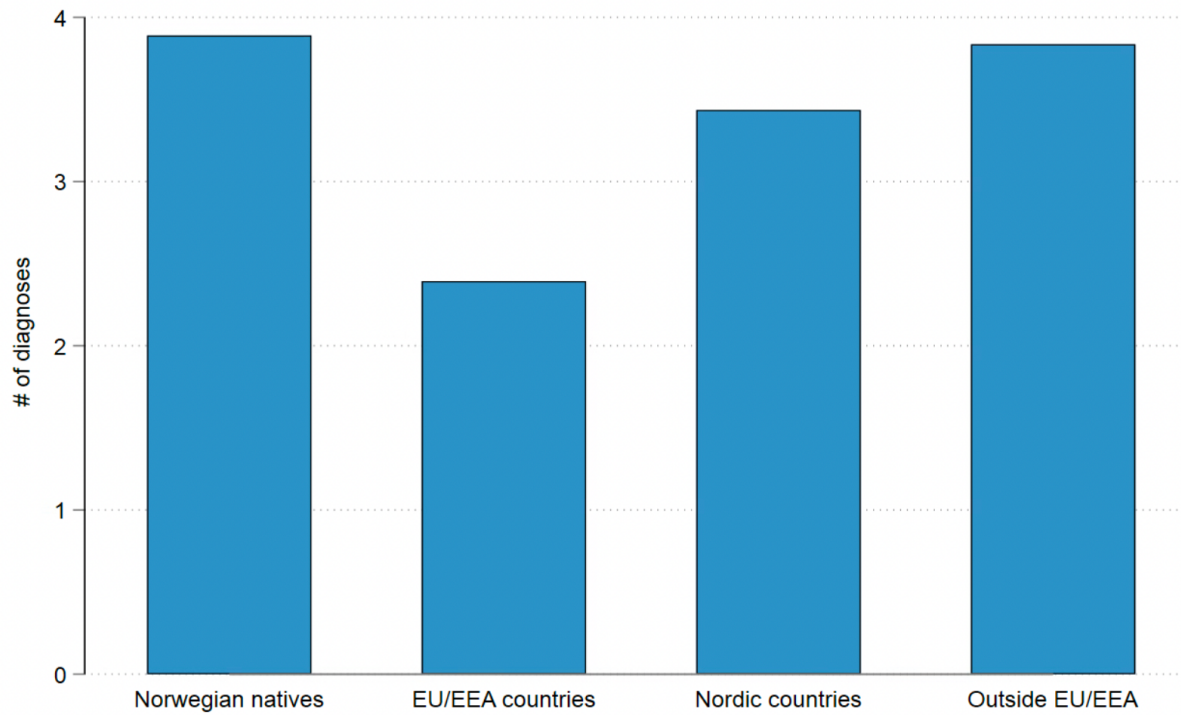
Figure 3: Predictive number of diagnoses in 2017 over relative net wealth, by reason for migration.



Notes: Based on Poisson regression including correction factor for likelihood of visiting the general practitioner.

Appendix 1a-1b: Descriptive statistics by Nativity Status

Mean number of diagnoses by country of origin



Median total net wealth by country of origin

