

SINT MAARTEN LABOR MARKET ANALYSIS

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Executive Summary

The labor market of Sint Maarten faces a dynamic set of challenges, rooted in demographic changes, labor migration, and the rapid pace of technological advancement. Compounded by the catastrophic impacts of natural disasters and the COVID-19 pandemic, these challenges demand strategic, proactive responses from both government and private sectors, attuned to the specificities of Sint Maarten's socio-economic context.

This labor market analysis aims to discern the alignment between the current and anticipated labor market demands and the educational offerings of Sint Maarten. A thorough review of existing literature and empirical data – including the latest statistics from Sint Maarten's 2022 Census- forms the foundation of this report, enriched by additional data from international and regional financial institutions. The labor market itself has undergone extensive scrutiny in recent studies, offering valuable perspectives on the interplay between labor dynamics and Sint Maarten's economic resilience.

Projections for the coming years suggest that Sint Maarten will undergo significant economic shifts, influenced by global trends and local policy changes. These include a continued reliance on tourism, alongside a pressing need for diversification and adoption of sustainable practices. Educational developments must respond accordingly, with an increased emphasis on higher education, specialized training, and digital competencies, to prepare for a labor market that values advanced skills.

This alignment or misalignment between the labor market and the educational system highlights a disconnect that presents both challenges and opportunities. The educational landscape is diverse, reflecting various international influences that may hinder the government's ability to tailor education to labor market needs. The analysis calls for further research into educational reforms, fostering a workforce with the skills and qualifications that align with market demands, especially in the face of increasing youth unemployment and a skills gap.

Opportunities for development lie in enhancing vocational training, STEM education, and lifelong learning initiatives to ensure that the labor force remains agile and capable. Advancing digital literacy across all levels of education is paramount in an increasingly digital global economy.

Additional research is essential to further investigate the gaps identified, particularly in areas such as technological advancement within education and the adaptation of educational systems to Sint Maarten's societal and economic realities.

In conclusion, this analysis serves as a call for strategic synthesis of education and labor market needs, advocating for a resilient and adaptable workforce. It requires collaborative research, policy innovation, and the continuous evolution of educational methodologies to secure Sint Maarten's socio-economic prosperity.

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1. Introduction

The labor market dynamics within Sint Maarten are subject to the multifaceted influences of demographic transitions and labor migration, alongside rapid advancements in digitalization and automation. These forces collectively engender significant challenges for the socioeconomic fabric of Sint Maarten, necessitating proactive and strategic responses from both governmental bodies and the private sector, with concerted consideration for the diverse array of stakeholders involved.

In contrast to other islands within the Dutch Caribbean, Sint Maarten's economy and labor market have been distinctly impacted by a confluence of natural disasters and global health crises. Specifically, the island was still in the throes of recovery from the catastrophic effects of Hurricanes Irma and Maria in 2017 when it was further affected by the unprecedented onset of the COVID-19 pandemic. This dual calamity has exacerbated the vulnerabilities of Sint Maarten's one-pillar economy, underscoring the imperative for an integrated, resilient approach to labor market development.

There is an acknowledged deficiency in comprehensive insights regarding the immediate and future labor market needs within Sint Maarten, compounded by the scarcity of contemporary island-specific research. The essentiality of harmonizing the education framework with labor market demands has been underscored by all four countries within the Kingdom of the Netherlands at the Strategic Education Alliance (SEA) Working Conference held in September 2022. Consequently, achieving such an alignment necessitates a granular understanding of labor market evolution, thereby facilitating the tailoring of educational programs to meet these demands.

Furthermore, the University of St. Martin (USM) has acknowledged that existing research endeavors examining the labor market have not adequately encompassed the transformative perspectives necessary for the development of the island's population. Prevailing studies, often undertaken by foreign organizations, have not fully captured the subtleties inherent in Sint Maarten's daily socio-economic reality. USM advocates for local-based research initiatives that resonate with local exigencies and incorporate a right to development approach as fundamental to the islanders of Sint Maarten and, by extension, the greater Caribbean region. Such an approach entails adopting a comprehensive framework based on the right to development that integrates social, economic, and environmental factors across all scholarly inquiries.

A nuanced understanding of Sint Maarten's labor market and educational alignment is not only pivotal for guiding the academic and vocational decisions of (prospective) students to mitigate brain drain but also instrumental for educational institutions to refine their offerings and bolster the educational infrastructure. The exigency for integrated labor market research in Sint Maarten as it relates to educational infrastructure is paramount, serving as a starting point for fostering a resilient and adaptive workforce capable of navigating the challenges of the contemporary and future socioeconomic landscape.

As requested by SEA, the following labor market analysis seeks to answer the following question: *How do the current and future (forecast) needs of the labor market in Sint Maarten fit in with the educational landscape of further education on the island, based on an integrated approach aimed at cooperation and taking into account the economic diversification and specific characteristics of Sint Maarten?* The requested analysis will address economic policy and diversification of the economy, current and projected (3-5 years) data of the labor market, all sectors and levels of professionalization, and human resource policy. The analysis may also address labor migration, undocumented work, unemployment, and other factors that affect Sint Maarten's labor market.

In order to answer the above research question, SEA has requested a review of all existing literature and data related to the labor market and educational offerings of vocational education and higher education in Sint Maarten. This preliminary analysis of available literature and data will allow for the identification of any gaps in the data needed to further understand current and future labor market dynamics. An initial review of the information on the relationship between the labor market and the island's educational structure suggests that while the identification of labor market gaps has been achieved, there is a need to commence further research into the required developments within the educational sector. Additionally, the research will allow for an indication into additional research as it relates to the labor market and educational development.

Chapter Two sets out the objectives for this analysis as defined by the SEA Program Team, clarifying what this study intends to accomplish. Chapter Three catalogs the data and reports consulted to inform this analysis. Chapter Four offers a snapshot of Sint Maarten's current economic situation, providing context for the labor market analysis that follows. Chapter Five delves into Sint Maarten's labor market by exploring its workforce demographics, industry distribution, and overall labor dynamics. Chapter Six forecasts potential shifts in the labor market based on trends and data from the reviewed literature. Chapter Seven examines how Sint Maarten's educational offerings align with the labor market demands. Chapter Eight proposes areas for additional investigation, informed by the discrepancies found between the labor market needs and educational structures. Chapter Nine summarizes the report, wrapping up the analysis with concluding remarks.

2. Objectives

The objectives were defined by SEA in the working plan for this labor market analysis and provided to all researchers working across the Dutch Caribbean islands. This labor market analysis for Sint Maarten is an initiative aimed at providing a robust, data-driven foundation for the strategic planning of higher and secondary education on Sint Maarten, and collectively within the Caribbean part of the Kingdom. The objectives of this analysis have been understood as follows:

- To develop a clear understanding of the current labor market conditions in Sint Maarten, delineate the employment demographics, industry distributions, and prevalent labor dynamics, thereby establishing a baseline for strategic planning;

- To project the labor market's evolution over the next three to five years, considering potential economic shifts, educational developments, and the implications of global trends like digital transformation and demographic changes;
- To critically evaluate how the existing educational landscape corresponds with current and future labor market requirements, and to identify the key areas where educational programs must be adapted or enhanced;
- To pinpoint specific skill shortages and opportunities where the educational sector can adapt to meet the emerging needs of the labor market, thereby fostering a workforce that is equipped to thrive in the evolving economic climate.

Consequently, this analysis aims to establish the groundwork for a strategic plan that aligns higher and secondary education with labor market needs, thereby enhancing the economic and social resilience of Sint Maarten.

3. Literature Overview

The following labor market analysis is an overview of existing data and literature related to the current and forecasted needs of the labor market and the disposition of the educational landscape to accommodate these developments and vacancies.

In the compilation of the current report, empirical data pertaining to the labor market of Sint Maarten have been meticulously sourced from the Department of Statistics within the Government of Sint Maarten. The department has disseminated a comprehensive synopsis of the 2022 census, which elucidates the most recent demographic and economic attributes of the population. Furthermore, this analysis has incorporated findings from the most recent Labor Force Survey, conducted in 2019, which encapsulates the state of the labor market as of 2018.

To augment the understanding of the broader economic milieu within which the labor market functions, additional data has been procured from the World Bank, the International Monetary Fund, and the Central Bank of Curacao and Sint Maarten. This integration of data ensures a robust and contextualized framework for examining the intricacies of Sint Maarten's labor dynamics.

Furthermore, the labor market of Sint Maarten has been the subject of extensive examination through a trio of studies, each bringing a distinctive perspective and methodological approach to understanding the multifaceted nature of labor dynamics within the island nation.

Panteia Analysis for the Ministry of VSA

The inaugural study, financed by the National Recovery Program Bureau, was spearheaded by Panteia for the Ministry of Public Health, Social Development and Labor (Ministry of VSA). This pivotal labor market analysis forms an integral part of the endeavors under the Sint Maarten Trust Fund's Income Support and Training Program, providing an foundational granular view of the labor market. Methodologically, the study employed interviews and surveys to collect data, with a strong emphasis on evaluating

and predicting labor market trends for the forthcoming five years. The employer survey conducted within this analysis was particularly geared towards ascertaining current and future labor requirements, distinguishing itself from previous economy-centric studies by focusing sharply on the granularity of skills and job vacancies.

Amsterdam Bureau for Economics Research for the Ministry of VSA

The second investigation, underwritten by the country packages initiative, was conducted by the Amsterdam Bureau for Economics. It is structured around a central research question posed by the country package, examining the potential for reform and modernization of Sint Maarten's labor market to simultaneously bolster economic resilience and enhance labor market dynamics. The subsidiary queries delve into potential revisions of current labor policies, acceleration of developing strategies, international best practices, and exploration of dismissal alternatives. Furthermore, the study contemplates unrecognized policy options, resource gaps, effective reform measures, policy overlaps, and the interplay with social security enhancements. This comprehensive draft report encapsulates a spectrum of analyses, ranging from the labor market's current legal framework to actionable recommendations and an execution plan for proposed labor market improvements.

JS Consulting Services Research for the Ministry of ECYS

The final study, conducted by JS Consulting Services and funded by the Department of Education, concentrates on labor market needs to inform the Study Financing Priority List for 2023-2026. Recognizing the mandates of the National Ordinance Study Financing, this research aims to elucidate labor demands that will guide financial support for tertiary education aspirants. Desk research methodology was coupled with stakeholder interviews, consultations, and focus group discussions, culminating in a survey engaging nearly 600 employers. This multifaceted approach revealed immediate to long-term hiring intentions across various sectors, with administrative support, accounting, IT, electrical, and business development professions highlighted as areas of significant need and challenge in staffing.

Each of these studies contributes distinct insights into Sint Maarten's labor market, informing a composite understanding that will underpin strategic planning. Collectively, they serve as a foundation upon which an integrated perspective of Sint Maarten's labor market can be constructed, facilitating a robust policy-making process that is well-aligned with the empirical realities of the labor force and educational landscape of the island.

4. Brief Economic Overview

In 2022, Sint Maarten's economy demonstrated resilience, primarily bolstered by a significant upsurge in net foreign demand attributed to a sharp increase in stay-over tourism, especially pronounced in the first half of the year.¹ According to the 2022 Annual Report of the Central Bank of Curacao and Sint Maarten, the dominant tourism sector, while a boon for foreign exchange earnings, also led to an increased import of goods and

¹ Annual Report 2022, Central Bank of Curacao and Sint Maarten, 2022, <https://exch.centralbank.cw/publications/annual-report/2022>.

services, moderating the net foreign demand's impact. Domestic demand witnessed modest growth, buoyed by public consumption, though investments were restrained due to budgetary constraints. Notably, private spending's influence on the economy remained neutral, with investment growth in substantial commercial and residential projects offset by lower consumer spending due to inflation.

Looking ahead, 2023's economic outlook for Sint Maarten is cautiously optimistic, with real GDP growth projected at 2.3%. This tempered growth projection aligns with a softening economic momentum across the monetary union, amidst challenging global conditions. Inflation, though expected to remain elevated, is forecasted to decline to 3.5%, indicating a slight easing of price pressures.

From a fiscal perspective, the aftermath of the COVID-19 crisis has led to an improved but still cautious scenario. The deficit on Sint Maarten's current budget is expected to narrow in 2022, thanks to an uptick in government revenues spurred by the rebound in economic activities. However, the deficit is projected to increase in 2023 to 2.7% of GDP, reflecting ongoing fiscal challenges. The public debt-to-GDP ratio is anticipated to slightly decrease in 2022 before a marginal increase in 2023, underscoring the nuanced fiscal landscape the nation navigates in balancing economic growth and fiscal health.

For the labor market, this economic environment presents a complex picture. The growth in tourism and public consumption suggests potential for job creation, particularly in the service sector. However, the restrained investment due to budgetary limitations and the moderated increase in net foreign demand may temper job growth in construction and investment-driven sectors. The anticipated softening of economic growth in 2023 could further impact labor market dynamics, potentially leading to cautious hiring practices. Moreover, while the slight easing of inflation may relieve some consumer spending pressures, its impact on real wages and purchasing power will be critical for the labor market's overall health. As such, labor market stakeholders in Sint Maarten should closely monitor these economic indicators to navigate the evolving employment landscape effectively.

5. Labor Market

Sint Maarten's labor market is characterized predominantly by its service-oriented sectors, with a pronounced emphasis on tourism and related industries acting as the primary engine of economic activity and employment. The demographic composition, as revealed by the census conducted in 2022², showcases a total labor force of 23,399³ with an employed population of 21,878⁴.

² Census 2022, Department of Statistics, Government of Sint Maarten, <http://stats.sintmaartengov.org/reports.php?cat=CEN>.

³ Total population 41,978.

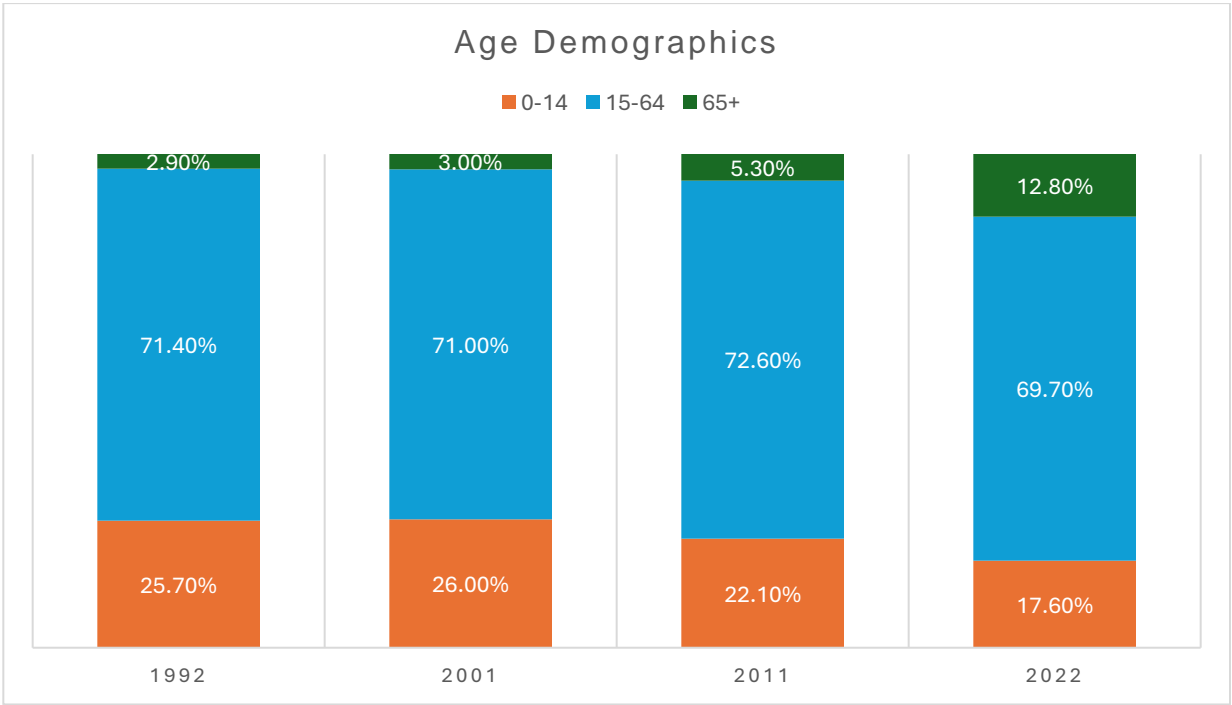
⁴ Email from the Division from Educational Innovation, Ministry of Education, Culture, Youth, and Sports, 08 April 2024.

Employment demographics and industry distributions provide a lens through which the current labor market conditions can be examined. The labor force participation rate, unemployment figures, and the sectoral composition of employment are indicative of a labor market that, while robust in its capacity to generate employment, is also marked by structural challenges such as skill mismatches and sectoral imbalances.

5.1. Labor Force Demographics

The labor market in Sint Maarten is shaped by several key demographic factors and employment trends, which have been revealed by the 2022 Census conducted by the Department of Statistics of the Government of Sint Maarten. With a total population of 41,978, the labor force constitutes 23,399 individuals, indicating a significant portion (55.74%) of the population's engagement in economic activities.

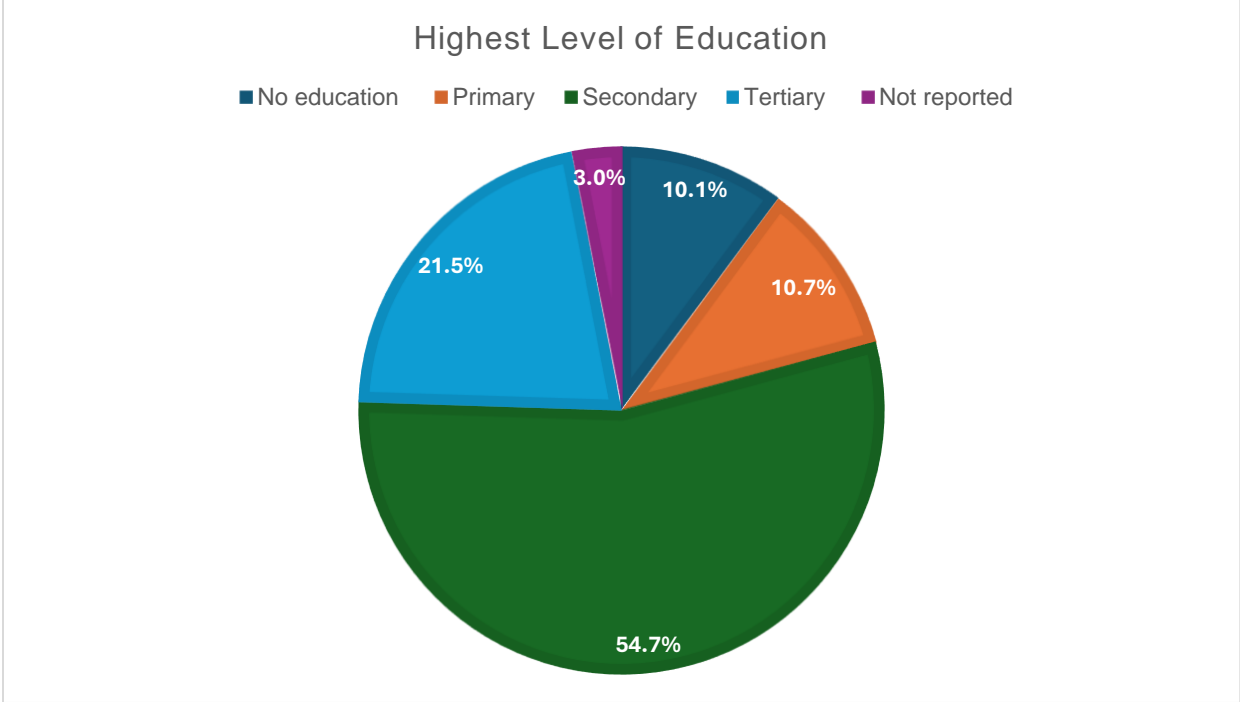
A notable demographic trend in Sint Maarten is the aging population. The percentage of individuals aged 65 and above has increased to 12.8%, reflecting a substantial rise from 5.3% in 2011 and 3.0% in 2001. This trend aligns with broader observations across the Kingdom of the Netherlands and has implications for workforce planning and social services. Despite the presence of an aging demographic, it does not automatically suggest that this segment of the population is exiting the workforce. With the upper limit of the General Old Age Pension (AOV) payment in 2023 established at 1,338.00 NAF, individuals beyond the retirement threshold may continue participating in the labor market, driven by financial necessities.



Source: Census 2022, Department of Statistics

Nationality and birthplace data reveal the diverse composition of Sint Maarten’s population. Dutch nationals constitute 53.6% of the population, with 34.6% of those with individuals being born on Sint Maarten.⁵ With a labor market dominated by immigrant workers, certain sectors have also come to be dominated by people specific nationalities as companies owned by foreigners tend to request work permits for workers from their home country.⁶

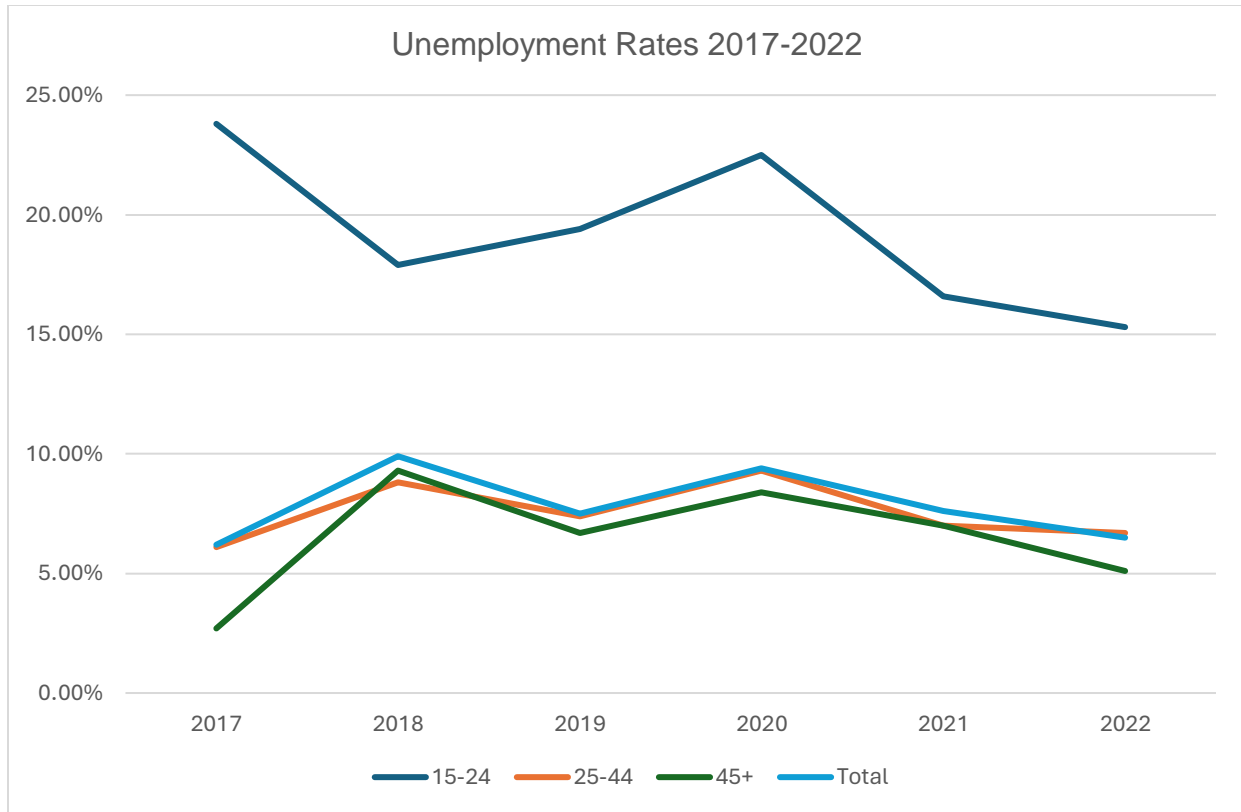
The most recent census has also revealed that the majority of the population has a secondary school level of education as their highest level of education.⁷



Source: Census 2022, Department of Statistics

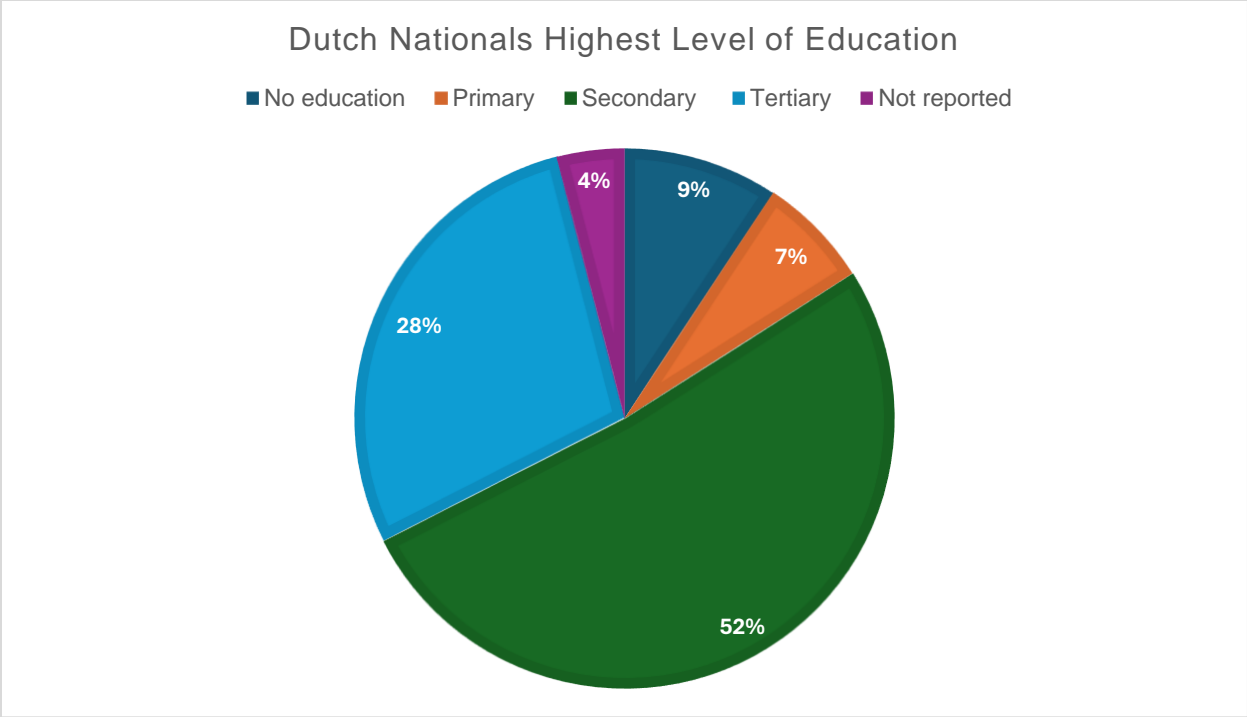
Employment data from the 2022 Census provide insights into the current state of the labor market. The overall unemployment rate has decreased to 6.5% (1,521 persons) from 9.4% in 2020 and 9.9% in 2018. An unemployment rate of 6.5% reflects a return to pre-Irma levels of unemployment (6.2%)⁸. However, youth unemployment remains a challenge, with the highest rate of 15.3% among individuals aged 15-24 years.⁹

⁵ Census 2022.
⁶ Labor Market Sint Maarten: Analysis, Recommendations, and Implementation, Economisch Bureau Amsterdam, October 2022.
⁷ Concerns individuals not currently in school. Census 2022.
⁸ Labor Force Survey 2017, Department of Statistics, Government of Sint Maarten, <http://stats.sintmaartengov.org/reports.php?cat=LFS>.
⁹ Census 2022.



Source: Census 2022, Department of Statistics

The encapsulated data offers an aggregated representation of both the local and migrant cohorts, derived from the latest census. Nevertheless, it should be noted that the individual educational attainment and skillsets may not necessarily be indicative of the quality fostered by Sint Maarten's educational institutions, as many inhabitants may have received their education abroad before relocating to Sint Maarten for employment opportunities. While it is not feasible to filter the census data exclusively for individuals who completed their education within Sint Maarten, it is possible to refine the data to specifically analyze the segment of the labor force holding Dutch nationality and residing on the island. The ensuing demographic profile delineates the labor force with Dutch nationality in Sint Maarten:



Source: Census 2022, Department of Statistics

Most Dutch nationals in Sint Maarten, like the wider population, have reached secondary school as their highest educational milestone. Yet, it's interesting to see that a higher fraction—7% more—of Dutch nationals hold tertiary qualifications compared to the general population. Looking at unemployment figures, there are 686 unemployed Dutch nationals, with the majority, nearly 68%, having finished only up to secondary school. Meanwhile, about 17% of these unemployed individuals have achieved a higher education level, holding tertiary degrees.¹⁰

However, as previously mentioned, utilizing Dutch nationality as a variable within the 2022 Census to evaluate the impact of Sint Maarten's educational system does not guarantee a comprehensive understanding. Given the island's predominantly migrant demographic, a significant number of students may carry their parents' nationality while having been educated primarily in Sint Maarten's school system. Moreover, the classification of Dutch nationals encompasses individuals who have undergone most of their formal education within other territories of the Kingdom of the Netherlands, further complicating any direct correlation with the educational outcomes of Sint Maarten.

5.2. Industry Distributions

Sector-specific employment data illuminate the primary areas of economic activity on Sint Maarten. The top three industries persons are employed in are: hotels and restaurants, wholesale and retail trade and public administration and defense.

¹⁰ Email from Division for Educational Innovation, Government of Sint Maarten, 18 March 18,2024.

Top 10 Industries Persons are Employed In

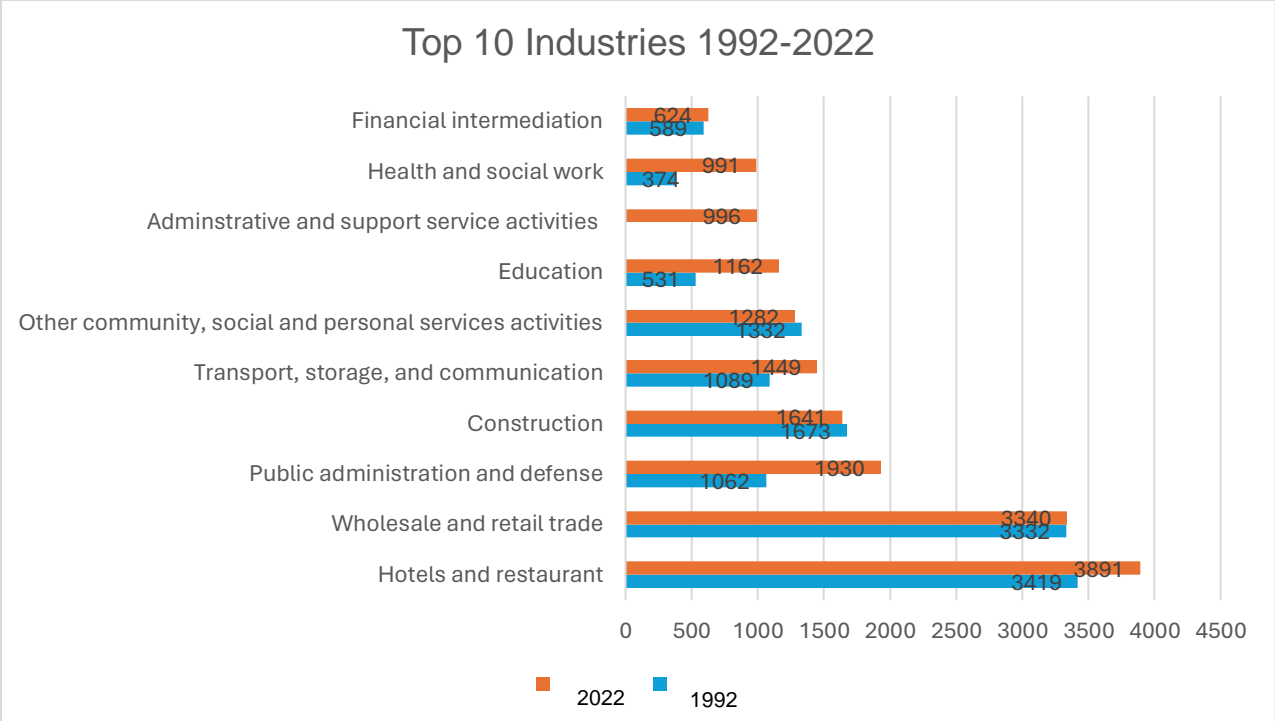
Industry	Amount
Hotels and restaurants	3891
Wholesale and retail trade	3340
Public administration and defense	1930
Construction	1641
Transport, storage, and communication	1449
Other community, social, and personal services activities	1282
Education	1162
Administrative and support service activities	996
Health and social work	991
Financial interpretation	624

Source: Census 2022, Department of Statistics

The hotels and restaurants sector, employing 3,891 individuals, is predominantly staffed by migrant workers¹¹, 81.1%, with local workers making up 18.9%. The wholesale and retail trade sector follows closely, employing 3,340 individuals, again with a high proportion of migrant workers, 83.8%. Public administration and defense stand out for having a more balanced workforce composition, 55.7% migrant workers, and the highest rate of tertiary education completion among its employees at 57%.

While the above three industries represent the top industries persons are employed in, the industries that have experienced the greatest growth from 1992 to 2022 are public administration and defense, education, and health and social work.

¹¹ Migrant worker refers to Census 2022 distinction of “foreign born”, persons born outside of Sint Maarten.



Source: Census 2022, Department of Statistics

Educational attainment within these sectors indicates that 76% of individuals employed in hotels and restaurants and 67% in the wholesale and retail trade have achieved secondary education as their highest level.

5.3. Labor Dynamics

The current literature on the labor market presents Sint Maarten’s labor force as characterized by a demand for skilled labor in key sectors, a mismatch between the supply of and demand for educated and skilled workers, and a need for strategic alignment between educational outcomes and labor market requirements to particularly address youth unemployment. The literature reveals a complex interplay between sectoral demands, educational attainment, and labor market needs.

While government and government-owned company positions are largely held by locals or Dutch nationals, all private sector industries are predominantly filled by immigrant workers, spanning low- to high-skilled roles.¹² Migrant workers are seen as providing the flexibility necessary for Sint Maarten’s tourism-driven and seasonally fluctuating economy. The high prevalence of temporary contracts and the significant influx of (temporary) foreign labor are considered essential for accommodating economic and seasonal shifts.¹³

¹² Labor Market Analysis Sint Maarten, Panteia, 22 February 2023; Labor Market Sint Maarten.

¹³ Ibid.

Concurrently, migrant workers are also seen as filling a particular skills shortage of locally qualified workers. Employers report significant difficulties in finding qualified applicants, a trend most pronounced in sectors integral to the island's economy such as tourism, accommodations, and hospitality. To address this shortage, there is a pronounced trend towards importing skilled labor, reflecting the existing skills gap within the local workforce.¹⁴

While initially Sint Maarten's labor market was reliant on foreign labor due to a lack of sufficient laborers in relation to economic growth, this continued reliance on foreign labor indicates possible challenges within the local education and training systems to meet the labor market's demands and highlights the potential for brain drain, where local talent seeks opportunities elsewhere due to a lack of suitable employment at home.¹⁵

Furthermore, the labor market in Sint Maarten is experiencing heightened demand across various sectors, notably within office and administrative support, accounting, computer and information systems, electricians, and business development professionals. These professions are highlighted for their high demand and the challenges in staffing and sourcing qualified applicants, indicating a pronounced skills gap and a mismatch between the education system and labor market requirements.¹⁶ The skills gap is further highlighted by employers' reports of challenges in staffing positions with appropriately skilled workers, particularly in sectors that are critical to Sint Maarten's economy, such as tourism, hospitality, and construction. Employers anticipate a need for more employees with higher education degrees such as Bachelor's, Master's, and Professional degrees in the coming years, reflecting an evolving job market that increasingly values advanced skills and education.¹⁷

However, this mismatch is not solely about academic qualifications but extends to the lack of vocational training and professional certifications that align with the specific demands of the job market.¹⁸ The discrepancy between the education system's outputs and the labor market's requirements suggests that educational institutions may not be fully aligned with the evolving needs of the economy, leading to a workforce that, while educated, is not necessarily equipped with the relevant skills or qualifications sought by employers.¹⁹ Concurrently, it is not merely an affront to educational institutions but also indicative of the absence of effective communication pathways for employers to engage in constructive discourse with educational entities, thereby facilitating the harmonization of labor market requisites with academic offerings.²⁰

The challenge of filling vacancies due to a scarcity of qualified applicants leads employers to adopt various strategies, including importing skilled labor, overburdening current

¹⁴ Labor Market Sint Maarten.

¹⁵ Labor Market Needs on Sint Maarten for Study Financing Priority List 2023-2026: Research Study Report, JS Consulting Services, September 2022; Labor Market Analysis Sint Maarten.

¹⁶ Labor Market Sint Maarten; Labor Market Analysis Sint Maarten. Labor Market Needs on Sint Maarten.

¹⁷ Labor Market Sint Maarten.

¹⁸ Labor Market Analysis Sint Maarten.

¹⁹ Labor Market Needs on Sint Maarten.

²⁰ Labor Market Analysis Sint Maarten.

employees, or not filling vacancies. This highlights the critical role of local education and training programs in producing a skilled labor force that meets market demands.²¹

In their examination on the labor market dynamics in Sint Maarten, Panteia, through surveying companies, consulting National Employment Services Center (NESC) data, and reviewing internet vacancies, analyzed the characteristics of vacancies across the business sector. This study highlighted a resurgence in the labor market following the COVID-19 pandemic, indicating an uplift in labor market dynamics with a vacancy rate in the business sector about 22% relative to workforce size. During the year leading up to the survey, more than 4,000 new vacancies were reported, with approximately 3,000 being filled. At the close of this period, there were 722 vacancies still open.

Key findings from Panteia's analysis of vacancies include the accommodation and food services, transportation and storage, and wholesale and retail trade sectors having the largest shares of new vacancies. An estimated 10-15% of vacancies remained unfilled, showcasing a gap in the labor market. The analysis also revealed that larger companies, particularly those with over 150 employees, dominated in terms of new, fulfilled, and open vacancies. The majority of these vacancies required vocational education, and the most common type of employment offer was a temporary contract with the perspective of a permanent contract.²²

The industries encountering the greatest challenges in vacancy fulfillment²³ included manufacturing, with a substantial 75% of positions difficult to fill, followed by construction at 54%, professional, scientific, and technical activities at 53%, human health and social work activities at 47%, and accommodation and food service activities at 42%.²⁴ According to Panteia's analysis, the principal reasons for the difficulty in filling new vacancies from December 2021 to November 2022, based on multiple responses with a maximum of five answers per company, were identified as follows:

Firstly, a significant 61% of companies with challenging-to-fill vacancies reported that applicants lacked the necessary skills. Secondly, 48% of companies found that applicants did not possess the required work experience. Thirdly, 46% of companies indicated that the correct attitude or motivation was absent among candidates. Fourthly, the professional knowledge of applicants was deemed insufficient by 32% of employers. Lastly, the specificity of roles, with 32% of companies highlighting the issue, suggests that specialist positions are particularly challenging to fill due to their unique requirements.²⁵

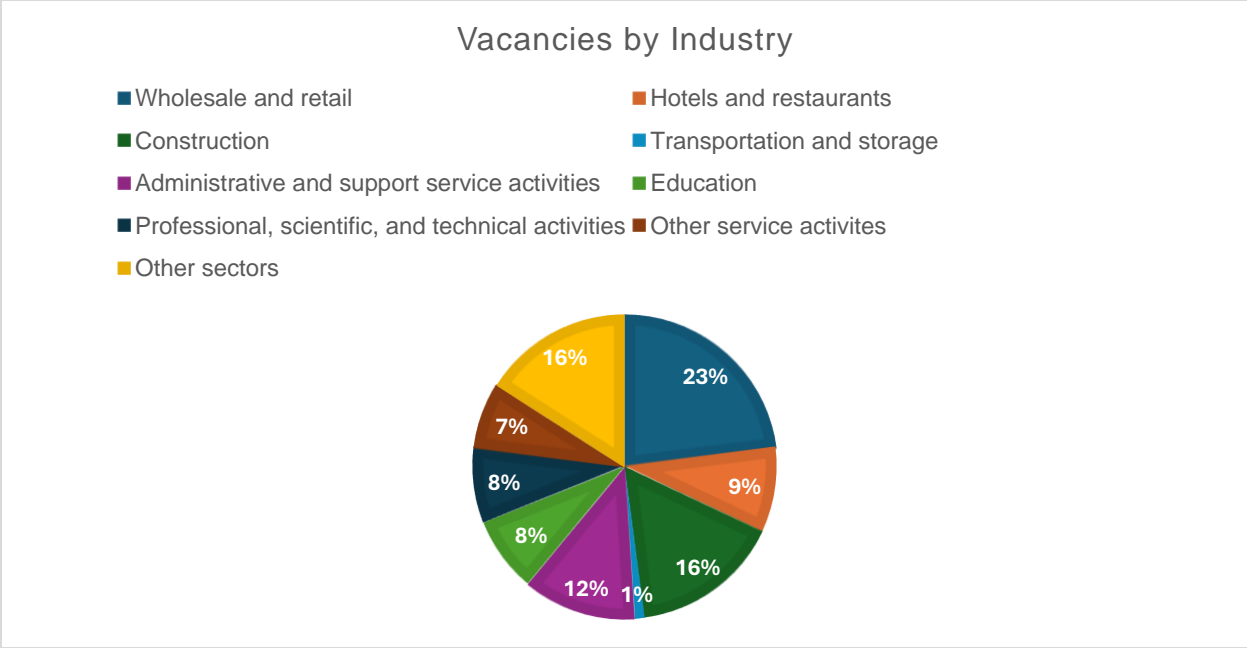
²¹ Ibid.

²² Ibid.

²³ For the period June to November 2022.

²⁴ Ibid.

²⁵ Ibid.



Source: Amsterdam Bureau for Economics²⁶

As mentioned in labor demographics, youth unemployment remains a challenge, with a significant proportion of this group possessing secondary education but lacking the necessary skills or training required by the market’s evolving demands.²⁷ Youth unemployment in Sint Maarten has been a persistent concern, with the rates experiencing a decrease from 23.8% in 2017 to 17.9% in 2018 to 15.3% in 2022, yet remaining significantly high compared to the overall unemployment rate.²⁸ This rate, nearly double the general unemployment rate, highlights the acute challenge faced by young people in the labor market. Notably, in 2017, youth unemployment was particularly pronounced when contrasted with other age groups. However, a decline was observed post-Hurricane Irma, which might be attributed to the increased economic need within families that propelled more young individuals into employment.²⁹

Moreover, the economic participation of individuals aged 15-24 increased from 32% in 2017 to 39% in 2018, suggesting a trend towards greater engagement of youth in the labor force.³⁰ However, a significant number of young people remain economically inactive, chiefly due to ongoing education or delay in entering the labor market. The youth unemployment rate in Sint Maarten is notably higher than in Aruba but lower than in Curacao, reflecting the varied economic conditions within the region.³¹

Furthermore, the education level is a determinant in unemployment rates, where individuals with lower educational qualifications tend to face higher unemployment risks.

²⁶ Labor Market Sint Maarten.
²⁷ Labor Market Analysis Sint Maarten.
²⁸ Ibid.
²⁹ Ibid.
³⁰ Ibid.
³¹ Ibid.

This disparity underscores a disconnect between the workforce's qualifications and the labor market's job requirements, evidencing an educational mismatch.³² The long-term outlook for youth employment is contingent on sustained economic growth and targeted policy interventions aimed at effectively integrating young people into the labor market, while also addressing the effects of brain drain and the competition from migrant workers.³³

Sint Maarten's labor force is continuously growing, characterized by an urgent demand for skilled labor that is currently unmet by local educational outcomes, signifying a pressing need for educational reform that aligns with the labor market's exigencies. Economic sectors critical to the island's prosperity, such as tourism and hospitality, rely heavily on migrant labor, highlighting the necessity for adaptability and the development of a local workforce equipped with not only theoretical knowledge but also the practical skills and certifications required by these industries. The projected evolution of the labor market suggests a transformative phase lies ahead, especially in specialized fields like office and administrative support, accounting, and IT, which will require a strategic overhaul of the current education and training systems to bridge the gap and harness the potential opportunities this change represents.

In advancing to the next section, "Projected Evolution," the labor market's unfolding scenario demands a closer examination of future trends and the educational reforms needed to nurture a workforce capable of meeting these emerging challenges. As Sint Maarten continues to navigate the balance between labor demands and the supply of skilled professionals, the forthcoming analysis will delve into the potential developments that could affect the labor market's trajectory, aligning it more closely with both current and prospective economic imperatives.

6. Projected Evolution (3-5 Years)

Sint Maarten may face significant economic and labor market transformations that will be influenced by global trends and local policy adaptations over the next 3-5 years. This section will delve into the projected evolutions, covering anticipated economic shifts, educational developments, and the global trends impact that will shape the labor landscape of the island.

6.1. Economic Shifts

Within the coming 5 years, Sint Maarten is poised to experience substantial economic shifts, with tourism forecasted to continue its dominance, catalyzing job growth in interconnected sectors such as trade, transportation and storage, as well as food and accommodation services. These sectors are anticipated to be the frontrunners in the economic uptick, with sectoral GDP growth rates projected to average around 3.2% annually from 2023 to 2027. In particular, construction (4.2%), trade (4.1%), and food and

³² Ibid.

³³ Ibid.

accommodation services (4.1%) are expected to lead this expansion.³⁴ The table below represents the forecasted growth in GDP per industry per year.

Industry	Average 2023-2027
Agriculture, mining and quarrying, manufacturing	2.2%
Energy, water, waste management	2.8%
Construction	4.2%
Trade	4.1%
Transport, storage, information and communication	4.1%
Food and accommodation services	4.1%
Banking and insurance	2.8%
Real estate activities	4.2%
Business services	1.0%
Government	2.2%
Education	2.2%
Medical and social services	2.2%
Culture, recreation, other service	2.2%
Total	3.2%

Source: Panteia³⁵

The following employment growth has been projected per year for the above listed industries:

Industry	Employment Growth 2023-2027
Agriculture, mining and quarrying, manufacturing	2.2%
Energy, water, waste management	2.8%
Construction	4.1%
Trade	3.8%
Transport, storage, information and communication	3.8%
Food and accommodation services	3.8%
Banking and insurance	2.8%
Real estate activities	4.1%
Business services	1.0%
Government	2.3%
Education	2.3%
Medical and social services	2.3%
Culture, recreation, other service	4.2%
Total	3.2%

Source: Panteia³⁶

While Panteia has successfully furnished projections concerning industrial and employment expansion correlated with GDP growth, the firm encountered limitations in

³⁴ Ibid.

³⁵ Ibid.

³⁶ Ibid.

providing forecasts for job vacancies due to the dearth of comprehensive data required for such predictive analysis.³⁷

However, global economic conditions and the imperatives of climate change are likely to steer Sint Maarten towards a more diversified economic landscape. The urgency of sustainable practices, especially in the tourism sector, may accelerate shifts towards eco-friendly tourism and alternative sectors that can mitigate the environmental impacts. The recognition of the island's vulnerability to climate-related events underlines the necessity for such an economic pivot.³⁸

Despite tourism's centrality, the island's economy may need to grapple with challenges like environmental policies that could influence traditional economic activities, space constraints that limit the expansion of new businesses, and growing concerns such as traffic congestion that could impact the ease of conducting business and the quality of life. These factors may spur innovation and lead to the exploration of new economic niches that can contribute to the overall resilience and sustainability of the island's economy. Therefore, while tourism remains a focal point, a gradual and strategic expansion into other industries that are less affected by environmental and spatial limitations appears prudent for long-term economic stability and growth.³⁹

In anticipation of these shifts, more than half of large company employers in Sint Maarten project an increased demand for employees with higher skill levels, which signifies the critical need for economic diversification and the fostering of a skilled workforce capable of adapting to new economic opportunities that may arise in this changing landscape.⁴⁰

6.2. Educational Developments

In the forthcoming years, Sint Maarten's educational system will face the challenge of aligning with the evolving needs of the labor market. A projected increase in the demand for higher education degrees—specifically Bachelor's, Master's, and Professional degrees—reflects an advancing job market that increasingly prizes advanced skills and higher levels of education.⁴¹

This shift is expected to be particularly salient in fields that support the island's economic mainstays and burgeoning sectors. Courses and programs in Business and Management will likely be sought after, as they provide foundational knowledge and skills pertinent to a variety of roles in the expanding trade, banking, and insurance sectors. Similarly, given the centrality of tourism to the island's economy, studies in Hospitality and Tourism will continue to be in high demand, especially those that integrate sustainable practices in response to the global push for environmental stewardship.

³⁷ Ibid.

³⁸ Ibid.

³⁹ Ibid.

⁴⁰ Ibid.

⁴¹ Labor Market Needs on Sint Maarten.

With the digital transformation underway, the labor market is predicted to increasingly require competencies in Information Technology and Computer Science. These fields are crucial for supporting the growing reliance on digital infrastructure and services. The demand for Legal Studies may also rise, aligned with the implementation of various programs outline within the Country Packages and expansion of the business sector with the complex regulatory environment that accompany it.

Healthcare and Fitness, as well as Social Sciences and Liberal Arts, may become more critical as the aging population grows, calling for an expansion of the healthcare and social service sectors and a more profound understanding of the societal impacts of demographic shifts. Public Safety, Public Affairs and Policy Management, as well as Education and Teaching, will remain vital, particularly as the island navigates economic and environmental changes and seeks to bolster its educational offerings. Lastly, Aviation Science is likely to see increased interest in response to the tourism sector's recovery and the associated expansion of the island's transportation services.

These educational developments necessitate not only an expansion in the range of programs offered but also a concerted effort to enhance the quality of vocational and tertiary education. Strategic partnerships with employers, dynamic and responsive curricula, and robust lifelong learning systems will be essential to meet these needs. Sint Maarten's educational institutions will need to foster a workforce that is not only academically knowledgeable but also equipped with the practical skills and professional certifications that match the specific demands of the job market.⁴²

6.3. Global Trends Impact

As Sint Maarten looks ahead to the next 3-5 years, global trends are expected to significantly influence the evolution of its labor market. The digital transformation, a critical trend, is rapidly reshaping the nature of work across the globe. The World Development Report 2019 by the World Bank outlines how technological advances have the potential to create new jobs, enhance productivity, and deliver effective public services. It emphasizes that as companies grow and markets evolve, technology will not only demand complex problem-solving skills but also teamwork and adaptability.⁴³ As such, workers in Sint Maarten will need to build upon these competencies to thrive in the digitally transformed economy.

The pandemic has served as a catalyst for digitalization, which the International Monetary Fund (IMF) notes has had far-reaching implications for labor markets and productivity. The accelerated adoption of digital technologies in advanced economies has proven to be beneficial, fostering resilience and shielding productivity during economic disruptions.

⁴² Ibid.

⁴³ World Bank, World Development Report 2019, <https://www.worldbank.org/en/publication/wdr2019>.

This indicates that Sint Maarten's labor market may experience similar benefits by embracing digital technologies and fostering a digitally competent workforce.⁴⁴

The World Economic Forum also underscores the importance of adapting to these technological shifts. It has been noted that as the digital economy expands, there is a growing differential in productivity between more and less digitized companies.⁴⁵ This trend suggests that economies like Sint Maarten's, which effectively manage the digital transition, will be better positioned to navigate future crises and economic challenges.

In light of these developments, Sint Maarten's labor market will likely see an increased demand for ICT skills and digital literacy. While traditional service jobs may experience a decline, technology-related positions are expected to grow. Such changes will necessitate revisions in labor laws and educational curricula to better prepare the workforce for the digital economy.

To stay competitive and aligned with global trends, Sint Maarten will need to promote policies fostering digital market competition and adapt labor regulations to support remote work and digital skill acquisition. The impact of digital transformation on the labor market holds both challenges and opportunities for Sint Maarten, as it does for economies worldwide. The strategic focus will need to be on bridging digital gaps, ensuring equitable access to digital resources, and integrating digital skills into education and training programs.

As we approach and anticipate projected economic developments and transformations, it is evident that Sint Maarten's economic and labor landscapes will face substantive changes, molded by the dual forces of persistent global trends and strategic local policy shifts. These transformations, while opening avenues for growth and development, also call for adaptive strategies and innovative approaches within education to harness the potential they present.

Economic diversification appears imperative for resilience, with tourism continuing to spur growth but also demanding a pivot towards more sustainable practices and industries resilient to climate impact. The labor market, thus, calls for individual development, with the anticipation of more complex job profiles requiring enhanced skill levels. Educational institutions are called to reorient their offerings, attuning curricula to the evolving economic narrative which increasingly values higher education and specialized training.

The global digital revolution, mirrored within the island's strategic vision, necessitates a workforce that is not only technologically adept but also capable of navigating a job market where traditional roles are supplanted by those requiring digital proficiency. The path forward for Sint Maarten, then, is one of proactive engagement with these global trends—

⁴⁴ International Monetary Fund, "How Pandemic Accelerated Digital Transformation in Advanced Economies", <https://www.imf.org/en/Blogs/Articles/2023/03/21/how-pandemic-accelerated-digital-transformation-in-advanced-economies>.

⁴⁵ Future of Jobs Report 2023, World Economic Forum, <https://www.weforum.org/publications/the-future-of-jobs-report-2023/>.

cultivating a digitally savvy population, promoting inclusive policies that bridge digital divides, and fostering an environment conducive to continuous learning and skill development.

To ensure continuous development, Sint Maarten must foster collaborations that link educational advancements with labor market needs, underpinning the island's economic growth with a robust, skilled, and adaptable labor force ready to meet the demands of both today and tomorrow. The following section will address the match/mismatch between the educational landscape and the labor market and opportunities for further collaborative development.

7. Correspondence of Education Landscape and Labor Market

As demonstrated so far, the current alignment between Sint Maarten's education landscape and the labor market reveals a discordance. This misalignment is underscored by insights from the labor market assessments, which show a significant skills gap and a workforce that, though educated, often lacks the professional skills currently demanded by employers.

7.1. Current Educational Landscape

In order to address how to correspond Sint Maarten's educational landscape with its labor market, it is important to acknowledge the characteristics of secondary and tertiary education on the island.

Sint Maarten's educational landscape is multifaceted, shaped by the availability of Dutch, British Caribbean, American, and Canadian systems. The system includes pre-school, primary, secondary, and tertiary education across both government-subsidized and private institutions. In the 2021/2022 period, 3,817 students were engaged in secondary education.⁴⁶ Language of instruction is either English or Dutch.⁴⁷ Secondary education in Sint Maarten consists of different levels and programs:

- VSBO: Voorbereidend Secundair Beroeps Onderwijs
- TKL: Theoretisch Kadergerichte Leerweg
- VSBO TKL: Voorbereidend Secundair Beroeps Onderwijs Theoretisch
- Kadergerichte Leerweg (similar to vmbo-t/mavo)
- HAVO: Hoger Algemeen Vormend Onderwijs
- VWO: Voorbereidend Wetenschappelijk Onderwijs
- PBL: Praktisch basisgerichte leerweg
- PKL: Praktisch Kadergerichte Leerweg/praktisch VMBO
- PSVE: Preparatory Secondary Vocational Education

⁴⁶ Labor Market Analysis Sint Maarten.

⁴⁷ Sint Maarten Education Review Final Report: Obstacles and Avenues to Improved Education, Ministry of Education, Culture, Youth, and Sports, October 2022, <https://www.sintmaartengov.org/Documents/Reports/Final%20Report%20Education%20Review%20measures%20G1%20Country%20Package.pdf>.

- IB: International Baccalaureate
- CSEC: Caribbean Secondary Examination
- CCSLC: Caribbean Certificate of Secondary Level Competence
- CAPE: Caribbean Advanced Preparatory Examination
- CIA: Ontario Secondary School Program
- LU: American High School Program⁴⁸

Below is the distribution of students across the different schools as reported by the Ministry of Education, Culture, Youth, and Sports (ECYS) for the 2021-2022 academic year:

Secondary School	Number of Students	Language of Instruction
St. Maarten Academy Academic VSBO	404	English
PSVE	261	English
Charlotte Brookson Academy	123	English
St. Dominic High School & IB	323	English
St. Maarten Vocational Training School	225	English
MAC Comprehensive Secondary Education	234	English
Sundial	257	English
Milton Peters College	907 (total)	
-VWO	57	Dutch
-HAVO	222	Dutch
-TKL	237	Dutch
-CCSLC	175	English
PBL/PKL	216	English
Caribbean International Academy	86	English
Learning Unlimited Preparatory School	unknown	English

Source: Ministry of Education, Culture, Youth, and Sports⁴⁹

However, in acknowledging the diversity present in the educational landscape of Sint Maarten, it is also paramount to acknowledge the ways in which such variety may hinder attempts from the Government of Sint Maarten to adapt educational programs to the needs of the labor market. As each educational system may be regulated by institutions outside of Sint Maarten, such as Caribbean, American, or Canadian accreditation systems, the Government may be discouraged by schools and their boards to intervene into the offerings of programs. In this manner, the Government of Sint Maarten may need

⁴⁸ Labor Market Analysis Sint Maarten.

⁴⁹ Sint Maarten Education Review Final Report.

to consider how the current educational landscape is adapted to answering the needs of the island's economy.

Moving on to post-secondary studies, recent secondary school graduates and adults already in the workforce can apply to the National Institute for Professional Advancement (NIPA), an institution for advanced vocational education.

NIPA offers the following courses: Associate Degree in Nursing, Business Administration, Cook Assistant, Culinary Arts, Educational Assistant, Electrical Installation Technician, General Property Maintenance, Hospitality Assistant, ICT Service Assistant, ICT Network Administrator/ ICT Network Manager, Licensed Practical Nurse, Maritime Assistant, and Social Pedagogical Worker.⁵⁰ The enrollment in programs offered by NIPA varies in response to fluctuations in labor market demands as well as the level of government and National Recovery Program Bureau subsidies.

Sint Maarten is also home to two universities: the American University of the Caribbean School of Medicine, offering the first two years of academic medicine study⁵¹, and the University of St. Martin (USM), providing associate and bachelor's degree courses.⁵²

USM offers the following courses: Associate of Arts degree in Business Management and Information Communication Technology, Associate of Arts degree in Hospitality and Tourism Management, Associate of Arts degree in General Liberal Arts, Bachelor of Arts degree in Business Administration and Management, Bachelor of Arts degree in Elementary Education, Bachelor of Arts degree in Social Work. The university also offers various continuing education courses and certifications including a Secondary Teaching Certification, English as a Second Language, St. Martin Cultural History and Heritage, and Introduction to Geographic Information System. In addition, for persons over the age of 16, USM offers General Educational Development courses which provides a U.S. High School equivalent diploma.⁵³

In its most recent Education Review, the Ministry of ECYS raised a fundamental problem with regards to assessing the state of the island's education system: a lack of data. The educational framework in Sint Maarten confronts a notable challenge in assessing its effectiveness due to a scarcity of essential data. There is a lack of detailed statistics on student progress over time and no benchmarking against international standards, as the region does not participate in global assessments. The existing assessment methods offer a limited view, focusing on local comparisons rather than measuring against the educational objectives of the system. This gap in data hinders the ability of the Ministry

⁵⁰ Email from Division for Educational Innovation, Government of Sint Maarten, 26 March 2024.

⁵¹ Notably, the American University of the Caribbean School of Medicine, while offering courses related to medicine may not be adequately understood as part of Sint Maarten's educational landscape. That is to say that students studying within this university follow a curriculum based on American health care accreditation. Regulations set by the Ministry of VSA may not allow for immediate integration of American accredited health care professionals.

⁵² Sint Maarten Education Review Final Report.

⁵³ "Programs", University of Sint Maarten, <https://www.usm.sx/programs>.

of ECYS to conduct a thorough evaluation of student performance and progress in relation to the goals of Sint Maarten's educational programs.⁵⁴

While the educational system is structured to offer a range of learning paths from foundational levels to higher education, the challenges persist, including a lack of professional training and qualified educators, which the education inspectorate has noted.⁵⁵ To address some of these challenges, preparations for a Raad Onderwijs Arbeidsmarkt (ROA) are underway, intending to forecast labor market trends.⁵⁶

As the majority of Sint Maarten's labor force is employed with secondary school being their highest level of education, taking a closer look at vocational education at the secondary level is imperative to understanding the labor force. Notably, the Ministry of ECYS has noted that "the vocational track often lacks vocational orientations and adequate allocation of students".⁵⁷ The Ministry highlights challenges within Sint Maarten's vocational training system, where many students pursue VSBO and SBO due to vocational interests, while others do so out of necessity, having limited educational alternatives. This dynamic has created a student body with varying degrees of motivation and, at times, negative perceptions from parents about vocational education. The situation is complicated by curricular constraints that hinder the delivery of contemporary vocational skills. Schools often lack the resources to adequately replicate professional settings, and the imbalance between internships and students further restricts the practical experience available to those eager to enter the workforce. These issues collectively impact the efficacy of vocational training in equipping students with the skills required for professional practice.⁵⁸ Consequently, the Ministry aims to uplift the image of vocational education and strengthen programs to be practically connected to the labor market.⁵⁹

Additionally, as mentioned above, schools offer two languages of instruction: English and Dutch. The Ministry of ECYS has identified problems in relation to Dutch-language education for students who do not have Dutch as a mother tongue. Despite English being the predominant language of instruction, some students, often motivated by a school's strong reputation, parental aspirations for further education in the Netherlands, or the possession of a Dutch passport, enroll in Dutch-medium schools. This choice can lead to learning hurdles, as these students may struggle with understanding Dutch, impeding their academic progress.⁶⁰

In alignment with observations made by the Ministry of ECYS, the choice of instructional language poses unique challenges within Sint Maarten's educational framework. Despite the labor market's predominant use of English, there remains an essential demand for proficiency in Dutch, particularly in sectors such as legal and judicial fields where Dutch

⁵⁴ Sint Maarten Education Review Final Report.

⁵⁵ Labor Market Analysis Sint Maarten.

⁵⁶ Ibid.

⁵⁷ Sint Maarten Education Review Final Report.

⁵⁸ Ibid.

⁵⁹ Ibid.

⁶⁰ Ibid.

is the authoritative language for legislation. Given the status of Sint Maarten as a nation recognizing both Dutch and English as official languages, it is incumbent upon the educational system to accommodate and reflect this bilingual reality, ensuring that students are adept in both languages to meet the full spectrum of the labor market's needs.

To better align education with the labor market, MECYS plans to improve connections between tertiary education programs and market developments. Emphasis will be placed on enhancing teacher training, recognizing companies as qualified training providers, and certifying professional supervisors. Additionally, increasing internship availability and establishing ongoing dialogue between vocational institutions and industry professionals are key goals to ensure that education meets the practical needs of Sint Maarten's labor market.⁶¹

7.2. Future Needs

While the analysis above has included the needs of the labor market, the following section summarizes the conclusions found across the studies reviewed for this labor market analysis.

In summary, the educational system in Sint Maarten is currently grappling with a misalignment that resonates through the labor market, marked by high youth unemployment rates and a service sector saturated with workers lacking tertiary education. This incongruence is exacerbated by a significant skills gap, particularly in specialized areas that necessitate a comprehensive educational background.⁶² A youth unemployment rate of 15.3% in 2022 indicates that the young workforce is not attaining the requisite skills and qualifications demanded by employers, especially in the critical tourism and hospitality sectors.⁶³

To bridge current gaps in the labor market, there is a call for educational reforms that update vocational training, improve access to tertiary education, and tailor curricula to the economic sectors vital to the island.⁶⁴ It should be noted that the 2022 Education Review conducted by the Ministry of ECYS recognized the nexus between educational outputs and labor market demands as a critical issue requiring attention.⁶⁵

Looking to the future, the education system must evolve to meet new labor market requirements, notably the growing need for digital skills and sustainable practices, to support a workforce adept in both technology and environmental conservation.⁶⁶ This involves an educational paradigm shift that embraces digital literacy and the principles of sustainable operation within the burgeoning tourism sector. Furthermore, an increase in

⁶¹ Ibid.

⁶² Labor Market Analysis Sint Maarten.

⁶³ Ibid.

⁶⁴ Ibid.

⁶⁵ Sint Maarten Education Review Final Report.

⁶⁶ Labor Market Needs on Sint Maarten.

the labor market's demand for advanced degree holders indicates the need for expansion in higher education, tailored to Sint Maarten's unique environmental and economic profile.⁶⁷ For the full list of studies/professions that have been identified by JS Consulting Services for financing by the Government of Sint Maarten, please visit Appendix A.

Educational initiatives must also promote lifelong learning, ensuring that all demographic groups, including the aging population, have opportunities to upskill and reskill in alignment with labor market transitions.⁶⁸ The available studies on the labor market emphasize the urgent need for a strategic reorientation of educational outcomes towards labor market demands, to not only mitigate the existing unemployment challenges but also to future-proof the workforce for impending economic and technological evolutions.

7.3. Opportunities

In response to the dynamic exigencies of Sint Maarten's labor market, an array of developmental initiatives stands ready to be harnessed. Paramount among these is the bolstering of career-focused vocational training programs. Such programs necessitate a synergy of practical training with industry-specific skill sets, designed to fill the chasms currently present between educational outcomes and employment prerequisites. They are vital for sectors such as tourism, construction, and burgeoning digital services, requiring the establishment of robust partnerships with the local business community to remain attuned to the labor market's oscillating demands.

Concurrently, fortifying STEM (science, technology, engineering, and mathematics) education emerges as a critical endeavor. STEM disciplines lay the groundwork for a contemporary economy predicated on innovation and technology. By infusing school and tertiary institution curricula with a strong STEM orientation, and investing in corresponding educational infrastructure and pedagogical expertise, the island can lay the foundation for a workforce aptly suited for industries where technical acumen and analytical prowess are prized.

Furthermore, as the demographic composition tilts towards an aging population, there is an impelling need to champion lifelong learning initiatives. These initiatives are instrumental in preserving an active labor force participation and countering the obsolescence of skills. By offering adult education and flexible learning modalities, Sint Maarten can endow its aging workforce with the capability to navigate through the labor market's evolving landscapes, thereby bolstering a labor pool that is both versatile and seasoned.

The advancement of digital literacy across all echelons of education is also imperative. In an era where digital fluency is indispensable, curricula must be reformed to embed digital competencies, capacitate educators to impart such skills effectively, and democratize access to technological resources. This commitment to nurturing digital literacy from the onset of educational journeys through to continuing adult education is pivotal for preparing

⁶⁷ Ibid.

⁶⁸ Ibid.

the labor force to seamlessly integrate into a digitized economy and adjust to its swift pace of change.

These endeavors, while distinct, are interdependent and pivotal for a holistic strategy aimed at equipping Sint Maarten's labor force for forecasted developments. Such a concerted focus on these strategic educational areas will not only enhance the resilience and competitiveness of the island's labor market but also ensure its adaptability to the inevitable global economic tides.

8. Additional Research

Concerning labor market dynamics, foundational research funded by the Government of Sint Maarten and the NRPB has yielded extensive data from employers on current trends and projections within the labor market. These studies have pinpointed a pivotal concern: a marked disconnect between the skillsets fostered by Sint Maarten's educational system and the qualifications sought by the labor market. This divergence manifests in pronounced skill gaps, which the analysis was intended to illuminate. While the Study Financing Priority List for 2023-2026 offers a preliminary indication of the academic backgrounds employers seek, deeper questions regarding the alignment of Sint Maarten's educational offerings with its economic imperatives remain unanswered. The following research domains have been identified for further exploration:

1. Misalignment between Sint Maarten education system and economic needs: While St. Maarten's educational institutions are based on the systems of foreign countries/regions, the Netherlands, the British Caribbean, America, Canada, research should assess whether the contours of these educational systems properly equip youngsters to navigate Sint Maarten's society and economy. In September 2022, Teen Times, a newspaper edited and written by youngsters from Sint Maarten and published in The Daily Herald, issued an edition regarding education on Sint Maarten.⁶⁹ One article specifically called for a rebuilding of the educational system which accounts for "[o]ur realities of culture, immigration, labor, and realistic future goals".⁷⁰ With employers and the youth identifying a disconnect between their educational systems and their society/economy at large, research should be supported to assess the coherence between the material taught within the different school systems and the current and forecasted needs of Sint Maarten's labor market.
2. Enhancing standing of vocational education: To enhance the standing of vocational education in Sint Maarten, research should focus on holistic reform, looking beyond promotion to fundamentally alter its societal value. Investigation into pedagogical innovation and global best practices is necessary to reframe

⁶⁹ "The state of education is a shameful embarrassment", Teen Times, September 2022, <https://www.thedailyherald.sx/archive/2022/09Sep2022/Sep-20-2022-TEENTIMES.pdf>.

⁷⁰ Ibid.

vocational training as an esteemed component of the educational system. By identifying and addressing perceptions among students, parents, educators, and policymakers, research can shift the view of vocational pathways from secondary options to prestigious career choices. This includes aligning vocational curricula with market and technological trends and recognizing vocational training as a catalyst for innovation and economic growth. Ultimately, this approach aims to transform vocational education into a strategic and attractive choice for the nation's future workforce.

3. Establishing a mechanism for dialogue between employers and Ministry of ECYS: The different studies have emphasized that job applicants are lacking the necessary education and skills to fill the positions that employers are seeking. However, in order for the education system to account for this lack of skills, there needs to be a structural mechanism for communication between employers and the Department of Education. Research should be supported into the establishment of a mechanism to support and encourage dialogue between employers and the Department of Education.
4. Misalignment between school curriculum and study financing priorities: The Study Financing Priority List is founded within research that has identified “gaps” in the labor market through employer surveys. While the Government of Sint Maarten supports students financially to pursue these studies, the question remains of whether secondary school programs are sufficiently preparing/supporting students to pursue the listed studies. Consequently, in the Ministry of ECYS's efforts to collect data regarding student study paths, research should assess the current alignment of students within given educational tracks in relation to the required professions.
5. Moving from brain drain to brain circulation: To address the "brain drain" phenomenon, research must scrutinize the educational and policy factors prompting the migration of skilled individuals. This includes a critical review of the state education system, scholarship, and study financing policies, as well as the proposed solutions of "brain circulation." Such research should illuminate the underpinnings and consequences of brain drain and develop strategic policies for maintaining human capital within Sint Maarten.
6. Assessing and integrating digital literacy into all levels of education: In light of the World Economic Forum's assertion that the majority of primary school students today will eventually find employment in new job types driven by the fourth industrial revolution,⁷¹ research that evaluates the educational landscape's current and future technological preparedness and curriculum integration should be pursued. Studies on the labor market in Sint Maarten have recurrently highlighted the impact of technological advancements in various industries,

⁷¹ World Economic Forum, “Future of Jobs”, January 2016,
https://www3.weforum.org/docs/WEF_FOJ_Executive_Summary_Jobs.pdf.

thereby emphasizing the need for an educational system that anticipates and prepares students for imminent job types in the evolving economic environment.

7. Assessing current curriculum vis-à-vis STEM education: To effectively fortify STEM education within its educational system, Sint Maarten should focus on conducting comprehensive labor market analyses to identify in-demand STEM skills, assessing the alignment of current STEM curricula with market needs, and evaluating practical learning components. Research should also explore robust teacher training programs and the potential for partnerships between educational institutions and the private sector to enhance the practical aspects of STEM education. These efforts aim to equip teachers better, engage students more effectively, and foster a skilled workforce ready to meet the demands of a rapidly evolving economy.
8. Addressing food security in labor market development: While current studies focus on the immediate needs of existing companies and the public sector, they do not consider diversification into nascent fields. The University of St. Martin has been engaged in research related to food security and agricultural development. While agriculture is noted to be a minimal 0.1% of the labor force⁷², inflation due to the COVID-19 Pandemic and Russia's invasion of Ukraine, has made food security an important discussion in the community as rising prices has affected Sint Maartener's buying power. Engaging in research related to food security and agricultural development is critical. Therefore, fields such as Agricultural Engineering may warrant inclusion in the study priority areas, necessitating further research to substantiate this direction.
9. Continuation and further development of lifelong learning: As revealed by the demographics of the 2022 Census, Sint Maarten has an aging population. Taking into account the pace at which technological advancements are transforming various industries, research should be undertaken to develop and promote programs for lifelong learning that assist persons within the labor force in building and gaining new skills.
10. Addressing biases present in policy towards regional tertiary institutions: While Europe and the United States remain the main destination for students seeking tertiary education abroad, research should be conducted into whether any biases within government policy are motivating students to study outside of Sint Maarten/ the broader Caribbean region. While, students may have individual preferences, USM would like to address the value bias that may be given to regional institutions. Students may not be informed of the opportunities regional education may give in shaping their educations to answer to Sint Maarten/Caribbean centric industries and problems.

⁷² Labor Market Analysis Sint Maarten.

9. Conclusion

The labor market analysis presented herein offers a comprehensive exploration of the intricate dynamics shaping Sint Maarten's socioeconomic landscape. It underscores the critical juncture at which the island finds itself, due to the interplay of demographic shifts, technological advances, and external shocks, all of which contribute to a rapidly transforming labor market. This examination not only highlights the pivotal role of an education system responsive to these changes but also underscores the need for an educational landscape that is synchronized with labor market demands, enabling the island's workforce to overcome existing challenges and capitalize on emergent opportunities.

In the wake of recent natural disasters and health crises, it has become evident that Sint Maarten's economic fortitude and labor market stability require resilient and flexible strategies that align educational output with the needs of the labor market. The call for reforms echoes through the analysis, manifesting the urgency for programs that not only impart theoretical knowledge but also focus on vocational training and the development of professional competencies in step with sectoral requirements.

The insights derived from the labor market studies reveal a critical skills gap, particularly among the youth, highlighting a disconnect that must be bridged to ensure economic vitality and social cohesion. The anticipation of increased demand for digital literacy and specialized training in the wake of global trends further necessitates a strategic reorientation of educational outcomes. The evolving needs of Sint Maarten's labor market, heavily influenced by tourism and susceptible to global economic and technological shifts, demand an educational infrastructure capable of fostering a versatile and skilled workforce.

This analysis serves as an impetus for concerted efforts towards educational reform and labor market development. It calls for initiatives that extend beyond traditional educational paradigms, advocating for the integration of digital competencies, sustainable practices, and continuous learning pathways into the educational fabric of the island.

As Sint Maarten looks to bolster economic and social development, it is incumbent upon educational institutions, policymakers, and industry stakeholders to forge a symbiotic relationship that will underpin the island's growth. The convergence of education and labor market requirements is not merely a desired state but a necessity, crucial for enabling the island's population to navigate the complexities of a dynamic global environment while maintaining its unique cultural and economic identity.

In conclusion, the recommendations point towards a strategic synthesis of educational development and labor market needs, ensuring that the island's workforce is not just prepared for the jobs of today but is also equipped to embrace the opportunities of tomorrow. This endeavor requires a collective commitment to research, policy reform, and the continuous evolution of educational practices, all of which are fundamental to securing a resilient and prosperous future for Sint Maarten.

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Appendix A

2023-2026 Study Financing Priority List as established by; Labor Market Needs on Sint Maarten for Study Financing Priority List 2023-2026: Research Study Report, JS Consulting Services, September 2022.

Business and Management

Business Administration, (BA) / (MBA) Accounting, (BA) / (BA to CPA)
Human Resources Management, (BA) / MA
Marketing, (BA)
Entrepreneur Studies, (BS)
Project Management, (BA)

Information Technology and Computer Science

Computer Information Systems, (BS) / (MS)
Cyber security, (BS)

Construction and Architectural Studies

Construction Management, (BS) / (MS)
Electrical Engineering, (BSE) / (MSE)
Graphic Information Technology (BS)
Software Engineering, (BS)
Architectural Design Technology, (BS)
Civil Engineering (BS)
 Building Science Emphasis
 Environmental Engineering Emphasis
 Structural Engineering Emphasis

Legal Studies

Legislative Lawyers, (BA) / (MA)
Legal Assistant, (BS) / (MS)
Management Economie en Recht (MER)

Healthcare and Fitness

Medical Doctors:
 Surgeons
 Optometrist
 Ophthalmologist
 Radiologist
 E R Doctor
 Neurologist
Dental Hygienist (BS)
Nursing, (RN) / (BSN) / (MSN)
 Pediatric Nurse
 Dialysis Nurse
 Emergency Room Nurse

Pharmacy Technician/ Assistant
Pharmacist
Radiology Technology, (BS)
Sports Management, (BA) / (BS)
Therapist (Sports)

Hospitality and Tourism

Hospitality Management, (BS) / (MS)
Culinary Arts, (BA) / (MA)

Public Safety

Forensic Science, (MS)

Social Sciences / Liberal Arts

Anthropology (MA)
Archaeology (MA)
Culture and Heritage Management (BA) / (MA)
Game Development and Interaction Design (BA)
Media and Entertainment Management (MA)
Journalism (BA)
Sports Psychology (BA) / MA)
School Psychology (BA) / (MA)
Spatial Economics and Data Analysis (MS)
Statistics (MS)
Creative and Festival Arts / Carnival Studies (BA)
 Costume designing, building, and Management Emphasis

Public Affairs and Policy Management

Public Administration, (BA) / (MPA)
Public Policy and Management (MA)
Legislative Analyst, (BA) / (MA) [VIII]

Education and Teaching

Elementary Education, (USM-EN) / (BAE)
Secondary Education, (BA) / (MA)
Special Education, (M. Ed)
Curriculum Specialist
Teachers (M.Ed.)
 English
 Dutch
 Spanish
 French
 Historian Emphasis (BA) / (MA)
 Fine Arts Emphasis (Drawing, Painting, Handicraft)
 Music Emphasis (Voice Coaches and Trainers)
 Physical Education Emphasis

Aviation Science

Aviation Management, (BS) / (MS)
Airline Pilot
Air Traffic Management/ Control (BS)
Air Traffic Control
Aviation Maintenance (BA) (Certificate)
Aviation Electronics (BA) (Certificate)

Vocational Training/Certification:

Radio Diagnostic Technician
Operating Room Technician
Biomedical Technician
Cardiac Technician
Automotive Mechanic
Plumber
Diesel Technology
Iron Welder
Carpenter
Computer Repair
Machinist (Lathe machine operator)
Mixologist (craft of mixing drinks)/ Certified Bartender
Couturier (Fashion Designer)
Seamstress
Tailor