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### *An Analysis of Labour Market Discrimination in Apartheid South Africa*

by Catarina Timm and Tammo Thobe

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**Contact:** Andreas Exenberger, University of Innsbruck (Austria), Department of Economic Theory, Policy and History, Universitaetsstrasse 15, A-6020 Innsbruck, e-mail: [andreas.exenberger@uibk.ac.at](mailto:andreas.exenberger@uibk.ac.at)

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**Kontakt:** Andreas Exenberger, Universität Innsbruck, Institut für Wirtschaftstheorie, -politik und -geschichte, Universitätsstraße 15, A-6020 Innsbruck, e-mail: [andreas.exenberger@uibk.ac.at](mailto:andreas.exenberger@uibk.ac.at)

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## *An Analysis of Labour Market Discrimination in Apartheid South Africa*

*by Catarina Timm and Tammo Thobe\**

**This paper examines the impact of apartheid policies on the South African labour market. A focus is laid on the Job Reservation Act of 1956. We adapt a model by Mariotti which illustrates that a reduction in job reservation is not due to a change in racist ideologies but driven by White economic incentives. As Job Reservation declined, the difference in educational attainments replaced the need for statutory job discrimination in the labour market. We show that even in a world without job reservation, Blacks were still unable to compete with Non-Whites on the labour market, due to insufficient education, systematically introduced as a form of pre-market discrimination.**

### HISTORY AND ECONOMICS OF APARTHEID

The history of South Africa, like that of many other African countries, is marked by European colonization, expansion, and conquest.<sup>1</sup> European settlement in South Africa started in 1652 when Jan van Riebeeck was sent by the Dutch East India Company to establish a supply station for the company's ships at the Cape of Good Hope. Subsequently, the region was dominated first by Dutch settlers and later by the British. The common goal of the White settlers was to conquer and control land in order to maintain their high standard of living. This agenda began in the Cape region and then spread until they had gained almost complete control of the entire territory of the modern state. The ideology of the settlers, whether of British or Dutch origin, was characterized by the belief of White supremacy and the denial of any human rights to the Natives.<sup>2</sup>

Conquest and settlement in South Africa moved rather slow however settlers gradually expanded control over farmland. The dispossession of Africans was a gradual process that was not accomplished through a single piece of legislation. However, from 1870 onwards, this process gained speed and reached its climax in 1913, with the introduction of the Native's Land Act, which prohibited Africans by law from acquiring or renting land outside their pre-existing reserves. The land reserved for Africans was not sufficient to sustain an independent and sustainable agricultural economy. The system's intention proved successful as they were forced to meet the labour demand of White farmers and miners.<sup>3</sup>

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\* At the moment of writing, Catarina Timm and Tammo Thobe are master students of Applied Economics at the University of Innsbruck. A previous version of this paper was provided as a seminar paper in economic and social history. Contact: [catarina.timm@student.uibk.ac.at](mailto:catarina.timm@student.uibk.ac.at) and [tammo.thobe@student.uibk.ac.at](mailto:tammo.thobe@student.uibk.ac.at).

<sup>1</sup> Pellicier and Ranchhod, "Racial classification", p. 1.

<sup>2</sup> Ibid., p. 22-35.

<sup>3</sup> Feinstein, *An economic History of South Africa*, p. 44.

One distinctive dimension of South Africa's history is the creation and implementation of the colour bar that reinforced racial segregation and ensured the dominance of a White minority over a non-White population. According to the colour bar, people in South Africa were divided into different races, including Whites, Africans, Coloureds (mixed race) and Asians.<sup>4</sup> This framework with its deep racist roots laid the foundation for the institutionalization of apartheid in 1948.

While the concept of racial discrimination did already exist in practice for long, what was new from then on is the systematic implementation and institutionalization of apartheid, following the victory of the Nationalist Party in the elections of May 1948.<sup>5</sup> In effort to institutionalize the conceptual framework of apartheid, the government introduced many segregation policies. To elaborate on all of them would go beyond the scope of this paper. It therefore only addresses three of the most profound Apartheid policies.

Two years after the Nationalist Party came into power, they introduced the Population Registration Act of 1950. The Act was a law in South Africa that introduced the systematic categorization of the population according to racial categories. The Act required all residents of South Africa to register according to their race, with the categories of "White", "Black", "Coloured" and "Indian". The Population Registration Act formed the legal basis for the racist policies of the Apartheid regime that were to follow.<sup>6</sup>

Another policy introduced by the Apartheid regime was the Bantu Education Act in 1953. It was introduced to direct and control the education system for Black students. The aim of this policy was to establish segregated and inferior education for the African population, thus perpetuating racial segregation and social inequality. Under the Bantu Education Act, Black schools were funded by the state, but limited resources were made available. This led to significant inequalities between educational facilities for Black and White students. Black schools received fewer resources, poorer equipment and outdated teaching materials compared to White schools. In addition, the curriculum in African schools was heavily controlled. The focus was on practical skills and simple occupations in order to confine the Black population to subordinate roles in society.<sup>7</sup>

Another drastic measure of the Apartheid regime was the Job Reservation Act, which is elaborated in more detail in the following section. The paper then continues by further analyzing the impact of labour market discrimination, especially through statutory job reservation, on the labour market. First identifying a theoretical model and secondly investigating the empirical

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<sup>4</sup> In light of the complexity of terminology in the context of different racial groups, we acknowledge the concerns expressed about the descriptive language used. It is important to recognize that all terms used in this context may be subjectively perceived as offensive and problematic. For the purposes of this study, we use the term "African/Native" to refer to people of dark skin and indigenous descent, while acknowledging that there are also White people indigenous to South Africa today. The term "Coloured" includes people born out of interracial sexual relationships. The term is not considered derogatory in South Africa. We use the term "White" to refer to people of European origin who immigrated to South Africa and their descendants. In addition, the term "Afrikaner" refers specifically to the Afrikaans-speaking White population.

<sup>5</sup> Tiryakian, "Apartheid and Politics", p. 696.

<sup>6</sup> Pellicier and Ranchhod, "Racial classification", p. 3.

<sup>7</sup> Feinstein, *An economic History of South Africa*, p. 158-160.

evidence for the findings of the theory and the general impact of labour market discrimination. After a discussion of market vs. pre-market discrimination, the paper concludes.

#### LABOUR MARKET DISCRIMINATION IN APARTHEID SOUTH AFRICA

With the election of the Nationalist Party in 1948 and the subsequent introduction of systematic apartheid, the extent of labour market discrimination was increased. Beforehand the full implementation was not possible because of lacking political support and the strong demand for cheap African labour. The former issue was removed, while the latter remained.<sup>8</sup>

The most notorious apartheid labour market legislation is the Industrial Conciliation Act of 1956, in particular Section 77, which extended job reservation to ‘any undertaking, industry, trade or occupation’. The Minister of Labour could appoint members to a tribunal, which may recommend the reservation of specific work to a specified race, namely Whites. The Minister then could legalize the tribunals’ proposition, even though employers or employees may have had a diverging bargaining agreement. Job reservation no longer only applied to skilled occupation, but statutory exclusion could now also be applied to semi-skilled work.<sup>9</sup>

Following the economic expansion and technological advancements after the Second World War, the labour requirements of the manufacturing sector changed, with increasing demand for semi-skilled and skilled workers due to the mechanization of the production process.<sup>10</sup> Simultaneously, the educational attainment of Whites increased, unveiling new job opportunities, especially for White Afrikaans speakers, reaching higher employment status. Mariotti shows that White workers were leaving low-skilled manufacturing work, such that only 22 per cent of the clothing industry was White upon the amendment to the IC Act in 1956.<sup>11</sup>

The remaining manufacturing labour force therefore consisted primarily of lesser skilled and uneducated Whites, who feared competition by African workers, which employers were able to hire at lower wages than their White counterparts. In light of this context the IC Act of 1956 was introduced by the Apartheid government.<sup>12</sup> Lundahl notes:

“[...] The root cause of the segregation of blacks from whites should not be sought in economic rationality, but in the fact that whites constitute a minority in South Africa [...]”<sup>13</sup>

The new provisions and regulations were applied in the already mentioned clothing industry, where four different roles were exclusively reserved

<sup>8</sup> Tiryakian, *Apartheid*, p. 696.

<sup>9</sup> Alexander and Simons, *Job reservation*, p. 19; Feinstein, *An economic History of South Africa*, p. 157-158.

<sup>10</sup> Feinstein, *An economic History of South Africa*, p. 129; Mariotti and Zyl-Hermann, *Policy, Practice and Perception*, p. 203.

<sup>11</sup> Mariotti, *Labour Markets*, p. 1104-1105.

<sup>12</sup> Mariotti, *Estimating the Substitutability*, p. 50; Mariotti and Zyl-Hermann, *Policy, Practice and Perception*, p. 203.

<sup>13</sup> Lundahl, *Rationale*, p. 1178.

for White workers. Job reservation was subsequently expanded to various other occupations and industries and even where no legal discrimination existed, informal and social pressures prevented employers from hiring African workers.<sup>14</sup>

The underlying developments in the manufacturing sector, leading to the IC Act, continued afterwards and spread to the South African economy. Due to economic growth and technological advances during the 1960s, the demand for semi-skilled and skilled work increased. The policy of job reservation was retained, which in principle prevented employers from resolving the bottleneck through employment and training of Black workers. However, the IC Act of 1956 provided enough scope for flexibility, leading to the increased employment of Black workers in these occupations. The industrial colour bar was allowed to “float” upwards, with White workers moving into managerial, professional and supervisory posts, while African workers could be employed in semi-skilled and skilled work.<sup>15</sup>

Occupational advancement of African workers was thus possible, however the issue of the ‘floating’ colour bar, as described for instance by Crankshaw, consolidates racial segregation in the South African labour market.<sup>16</sup> The discussion of this subject will be continued in subsequent chapters.

During the 1970s the developments accelerated. Motivated by occupational advancements and decreasing wage differentials between Black and White workers, Black workers started to protest for better labour conditions. Supported by British and American multinationals and governments, the system of job reservation began to deteriorate.<sup>17</sup> In 1977 two commissions were set up, the Wiehahn and Riekert commissions, to investigate labour market conditions in South Africa. Both reported in 1979 to the parliament, suggesting the removal of statutory job reservation and other discriminatory labour market policies. The government followed the recommendations and decided to abolish job reservation, which was gradually eliminated until 1984.<sup>18</sup>

The formal institutionalization of discriminatory labour market policies, as described above, did not emerge based on rational economic reasoning, but on the grounds of political capture of the minority in South Africa, namely Whites. It were thus economic developments that in turn led to the dismantling of these policies. Tiryakian wrote almost prophetically in 1960:

“If the economy of the Union falters because of the economic sacrifices entailed in separate development, apartheid could ironically lead to the fall from power for the Nationalists.”<sup>19</sup>

Although the removal of job reservation was initially driven by White economic incentives, and discrimination and inequality did not disappear

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<sup>14</sup> Feinstein, *An economic History of South Africa*, p. 158.

<sup>15</sup> Feinstein, *An economic History of South Africa* p. 189-192, p. 230-233.

<sup>16</sup> Crankshaw, *Racial Division*, p. 649-652.

<sup>17</sup> Moll, *Discrimination*, p. 293-294.

<sup>18</sup> Feinstein, *An economic History of South Africa*, p. 240-242; Thompson, *A history of South Africa*, p. 224.

<sup>19</sup> Tiryakian, *Apartheid*, p. 696.

afterwards, the removal marks a changing attitude towards apartheid and the subsequent democratization in 1994.<sup>20</sup>

### THEORY OF LABOUR MARKET SEGREGATION

In the course of the 20<sup>th</sup> century, there was a significant change in the South African labour market that had a remarkable impact on the employment situation of the African population. Despite the introduction of job reservations, more and more Africans were employed in semi-skilled occupations.<sup>21</sup> This chapter focuses on the model of a South African Labour market, which can be used to explain the shift on the labour market in South Africa in the second half of the 20<sup>th</sup> century. Additionally empirical evidence in support of the model is provided.

#### *A Model of Labour Market Segregation*

This section adapts a model by Mariotti from her paper *Labour markets during apartheid in South Africa*. Mariotti in turn bases her ideas on a model by Lundahl from the year 1982, which is a modification of Porters model of a Southern African-type economy.<sup>22</sup> The model illustrates that increased employment of the White population in skilled occupations leads to a decrease in labour supply for them in semi-skilled jobs. This in turn leads to increased employment of Black workers in semi-skilled occupations to fill the gap created between labour demand and supply. The consequence is a reduction in the use of job reservation policies. As argued above, this reduction in job reservation is not the result of a change in the racist ideologies of the White population at that time but rather driven by White economic incentives.<sup>23</sup>

The model assumes a two-sector economy. The first sector, mining, employs unskilled workers only. The second sector is manufacturing, which employs unskilled, semi-skilled and skilled workers. Semi-skilled workers are distinguished from unskilled workers by the fact that they are given the opportunity to undergo vocational training while working. This so-called on-the-job training gives them additional skills and competences. Apart from this, there are no significant differences in the educational requirements for these two groups of workers. Access to skilled occupations requires formal education.

Additionally, the model assumes that Whites have the distributional control over occupations. It is presumed that the majority of both the Black and White populations had only a low level of education and that poorly educated Whites had to compete with poorly educated Blacks unless job reservation was in place. This resulted in retaining all occupations that require a semi-skilled or skilled level for the White population. In the model it is therefore assumed, that Whites work in semi-skilled and skilled manufacturing

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<sup>20</sup> Mariotti, *Labour Markets*, p. 1120-1121; Mariotti and Zyl-Hermann, *Policy, Practice and Perception*, p. 222.

<sup>21</sup> Mariotti, *Labour Markets*, p. 1101.

<sup>22</sup> Lundahl, *Rationale*; Porter, *Southern African-Type Economy*.

<sup>23</sup> Mariotti, *Labour Markets*, p. 1100.

occupations, while Blacks work in mining and unskilled manufacturing jobs.<sup>24</sup>

In each sector there is one representative firm, with a constant returns-to-scale production function. The production function of the mining sector is as follows:

$$(1) \quad Y_{1t} = (a(A_K K_{1t})^\lambda + (1-a)(A_U U_{1t})^\lambda)^{1-\lambda}, \quad 0 < \lambda < 1$$

$Y_{1t}$  denotes the outcome of the production process in the mining sector in time  $t$ . The variable  $K_{1t}$  represents the capital invested in the mining industry in time  $t$ , whereas  $U_{1t}$  denotes unskilled African workers in time  $t$ .  $A_K$  and  $A_U$  are the respective productivities of the input factors capital and labour. The relationship between unskilled labour and capital is one of complementarity, where the parameter  $a$  determines income shares and the parameter  $\lambda$  governs the elasticity of substitution between unskilled labor and capital equipment.<sup>25</sup>

The production function of the manufacturing industry is given by:

$$(2) \quad Y_{2t} = \left( b(B_K K_{2t})^\alpha + (1-b)(c(B_M M_t)^\gamma + d(B_S S_t)^\gamma + (1-c-d)(B_U U_{2t})^\gamma)^\gamma \right)^{\frac{1}{\alpha}}, \quad 0 < \alpha, \gamma < 1$$

$Y_{2t}$  again denotes the production outcome of the sector in time  $t$ ,  $K_{2t}$  represents the capital employed in the manufacturing sector in time  $t$ .  $M$ ,  $S$  and  $U$  indicate the labour inputs in time  $t$ , where  $M_t$  denotes semi-skilled workers,  $S_t$  denotes skilled workers and unskilled workers are governed by  $U_{2t}$ . All production inputs are complements.  $B_K$ ,  $B_U$ ,  $B_M$  and  $B_S$  are the respective factor productivities. Parameters  $b$ ,  $c$  and  $d$  determine the income shares, while  $\alpha$  and  $\gamma$  are parameters controlling the elasticity of substitution between capital input and labour input (unskilled ( $U$ ), semi-skilled ( $M$ ) and skilled ( $S$ ) labour input).<sup>26</sup>

Relative factor prices are then determined by the ratios of first-order conditions for profit maximization. With competitive markets and constant-returns-to-scale, this yields for the manufacturing sector:

$$(3) \quad \frac{w_{mt}}{w_{ut}} = \frac{c}{1-c-d} \left( \frac{B_M}{B_U} \right)^\gamma \left( \frac{U_t}{M_t} \right)^{1-\gamma}$$

$$(4) \quad \frac{w_{st}}{w_{ut}} = \frac{d}{1-c-d} \left( \frac{B_S}{B_U} \right)^\gamma \left( \frac{U_t}{S_t} \right)^{1-\gamma}$$

$$(5) \quad \frac{w_{st}}{w_{mt}} = \frac{d}{c} \left( \frac{B_S}{B_M} \right)^\gamma \left( \frac{M_t}{S_t} \right)^{1-\gamma}$$

<sup>24</sup> Mariotti, *Labour Markets*, p. 1106-7.

<sup>25</sup> *Ibid.*, p. 1107.

<sup>26</sup> *Ibid.*, p. 1107.

In equations 3 to 5,  $w_t$  is the respective wage of the different skill levels in time  $t$ . The left-hand sides of the equations therefore display wage ratios. These can be interpreted as skill premia of one skill level over the other. Put differently, the difference in wages based on the level of skills or qualification required for a particular occupation. The right-hand side consists of two parts. A ratio of the productivities multiplied by their respective income shares and the ratios of workers employed in the respective sectors.

Equation 3 depicts the premium for semi-skilled over unskilled workers. If the ratio of unskilled to semi-skilled labour increases (i.e., less semi-skilled workers are employed) the skill premium of semi-skilled workers over unskilled workers will increase. In contrast, if the ratio of semi-skilled to unskilled workers increases, meaning the proportion of semi-skilled workers relative to unskilled workers is growing, the premium to semi-skilled workers over unskilled workers will decrease. As a result, it is expected that semi-skilled workers want to restrict the number of workers employed on their skill level in order to keep their skill premium over unskilled workers high.

The premium of skilled workers over unskilled workers is displayed in equation 4. The workings are very similar to that of equation 3. If the ratio of unskilled workers to skilled workers increases, the premium for skilled workers over unskilled workers increases as well.

Lastly the skill premium of skilled workers over semi-skilled workers is illustrated in equation 5.<sup>27</sup>

### *Empirical Evidence*

The theoretical implications of the model do not suffice to draw conclusions on the changing landscape of the South African labour market during apartheid, especially in the 1970s. Hence it is essential to provide empirical evidence in support of the theoretical model.

First it must be shown that White Afrikaans educational attainment increased during the observed period. Comparing younger and older Afrikaans speaking cohorts with English speaking ones in regard to education attained, shows that by 1970 68 per cent of the oldest working Afrikaans cohort had completed eight or nine years of education, compared to 30 per cent of the corresponding English cohort. In contrast, 60 per cent of the youngest working Afrikaans cohort had completed ten years and 29 per cent 12 years of education (matriculation), compared to 50 per cent and 39 per cent respectively for the corresponding English-speaking cohort. By 1970 we can observe a convergence between White Afrikaans and English-speaking South Africans concerning education, demonstrating an increase in Afrikaans educational attainment.<sup>28</sup>

Moving forward it must be shown that educational advancements coincided with upward mobility in occupational ranks by Whites. Crankshaw shows a declining trend for White employment in semi-skilled jobs, routine white-collar employment, artisanal jobs, supervisory jobs, and skilled trades,

<sup>27</sup> Mariotti, *Labour Markets*, p. 1107-8. For a more detailed description of the model, readers are referred to Mariotti (2012): "Labour markets in South Africa".

<sup>28</sup> Mariotti, *Labour Markets*, p. 1110-1112.



paired with increased advancement in managerial and professional employment.<sup>29</sup>

Using data from the 1970 and 1980 Population Census supplemented by the South African Manpower Surveys, Mariotti analyzes occupational advancements via the SEO index.<sup>30</sup> She demonstrates that White employment in skilled jobs increased, as the percentage of Whites employed in skilled jobs increased from 16.7 per cent in 1969 to 26.5 per cent in 1985, with the average SEO index for White males increasing from 47 in 1970 to 50 in 1980. Once again, dividing the data into an old and young cohort and distinguishing between Afrikaans and English shows that occupational advancement for Afrikaans speakers was more pronounced, in average SEO ranks, and converged toward the occupational ranks of English speakers. At the same time younger workers, who were better educated, were more likely to be employed in higher skilled occupations than their older counterparts.<sup>31</sup>

The empirical evidence thus suggests that higher educational attainment was met with White workers being employed in higher skilled occupations. Empirical support is still required to substantiate the claim that skilled White workers benefitted from an increase in semi-skilled workers in order to maintain their wage premium, as demonstrated in the model.<sup>32</sup>

The changes in occupational ranks, as described above, hint at a shift of labour market power concentration towards skilled workers, which in turn would implicate that skilled workers could maintain higher wages. To investigate this argument, Mariotti estimates log wages of White working males between 1970 and 1980, introducing a categorical variable that indicates the specific occupation rank (semi-skilled or skilled). The results of the regression show a higher return of wages for skilled, than for semi-skilled work, *ceteris paribus*. Additionally, the year-skill interaction is insignificant, indicating that the return to skilled work did not decrease over time as more skilled workers entered the labour market. The regression therefore supports the hypothesis that White workers benefitted through the reduction in job reservation and the successive increase of African workers in semi-skilled work.<sup>33</sup>

In the same period of upwards mobility by White workers due to skill acquisition, Crankshaw also observes an upwards movement in occupations by African workers. The proportion of semi-skilled African workers grew from 24 per cent in 1965 to 40 per cent in 1990. Additionally, the proportion of white-collar employment of African workers doubled from 15 per cent in 1965 to 31 per cent in 1990, especially after 1979. Furthermore, African workers moved increasingly into artisanal work in response to the removal of statutory job reservation.<sup>34</sup> Mariotti notably identifies an average increase of

<sup>29</sup> Crankshaw, *Racial Division*, p. 643-652.

<sup>30</sup> The Socio-Economic Index of Occupational Status (SEO index) spans from a minimum of 17 for agricultural workers to a maximum of 90 for judges. Each occupation in the census is assigned a unique SEO index number corresponding to its position on the index. Mariotti, *Labour Markets*, p. 1110-1111.

<sup>31</sup> Mariotti, *Labour Markets*, p. 1112-1114.

<sup>32</sup> Mariotti, *Labour Markets*, p. 1110.

<sup>33</sup> *Ibid.*, p. 1114-1115.

<sup>34</sup> Crankshaw, *Racial Division*, p. 643-652.

four points in the occupational rank for African workers during the 1970s, from 27 to 31.<sup>35</sup>

This described upward movement of African workers is however limited to the outlined occupational ranks, there was limited to no movement into the skilled trades, which demonstrates the issue of a 'floating' colour bar in the South African labour market. African workers advance into previously determined White occupations, while simultaneously White workers move up the occupational hierarchy into more skilled and better paid jobs themselves.<sup>36</sup> African and White workers show a gap in the SEO index of 23 points in 1970 and 22 points in 1980.<sup>37</sup> Despite the changing labour demands in the market and the subsequent changes in occupational structures that led to the gradual decline of statutory job reservation, the underlying discriminating and segregating structures remain in the form of an informal floating colour bar.

The changes in occupational structures for both White and African workers, as well as educational changes for White workers have been illustrated. What remains to be investigated is educational changes for Africans during this period.

Analysing the period between 1975 and 1985, Moll finds an increase in the returns of education. Again, differentiating between younger and older cohorts, the author shows that increasing quality of education during the 1960s and a decline in discrimination during the 1970s benefitted especially younger African males, while the returns to older African workers were negligible.<sup>38</sup> Mariotti's findings seem to support those of Moll that educational attainment increased, especially for younger Africans. However, she also notes that the educational attainment is still comparably low.<sup>39</sup>

The increase in educational attainment for Africans raises the same question as for Whites. How much of the educational advancements explain the increase in occupational realizations?

Mariotti therefore uses a regression with the SEO index as the dependent variable and educational attainment as the explanatory variable. By substituting the differences in educational attainment into the results of the regression, she finds that for Africans only 18 per cent of the change in the SEO index is explained by educational changes in 1970 and 19 per cent in 1980, while for Afrikaans speakers 67 per cent of the occupational changes are explained by increases in educational attainment, which is in line with the results from above.<sup>40</sup> These results support the theory that economic considerations of Whites drove the reduction of institutionalized job reservation, since only a small part of the occupational changes for Africans can be explained by increased educational attainment.

What consequently determines the different outcomes for Africans and Whites and most importantly what impact does statutory job reservation and discrimination have on the aforementioned? To answer this question, Mariotti

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<sup>35</sup> Mariotti, *Labour Markets*, p. 1116.

<sup>36</sup> Crankshaw, *Racial Division*, p. 649-652.

<sup>37</sup> Mariotti, *Labour Markets*, p. 1118.

<sup>38</sup> Moll, *Quality of Education*, p. 2-8.

<sup>39</sup> Mariotti, *Labour Markets*, p. 1116-1118.

<sup>40</sup> *Ibid.*, p. 1117-1118.

employs an Oaxaca decomposition<sup>41</sup> which has been commonly used in labour market analysis to disentangle explained components, meaning specific economic characteristics, such as educational attainment, from unexplained components, namely discrimination in form of for example institutionalized job reservation and other unobservable factors.<sup>42</sup>

Mariotti uses the regression and the corresponding estimates from the effect of education on occupational outcomes from above to decompose the White and African SEO indexes as follows:

$$(6) \quad SEO_W - SEO_A = f_W(\bar{X}_W) - f_A(\bar{X}_A) \\ = [f_W(\bar{X}_W) - f_W(\bar{X}_A)] + [f_W(\bar{X}_A) - f_A(\bar{X}_A)]$$

Where  $SEO_i$  is the corresponding occupation index,  $f_W(\bar{X}_W)$  determines the White index based on specific white characteristics and  $f_A(\bar{X}_A)$  the corresponding function for the African index based on specific African characteristics. The function  $f_W(\bar{X}_A)$  defines the hypothetical African index if Africans would receive the same treatment as Whites. The left term is therefore the explained component, meaning the difference between the White index and the hypothetical African index, while the right term resembles the unexplained component, namely the hypothetical African index subtracted by the actual African index, capturing discrimination patterns.<sup>43</sup> The results of the decomposition are presented in table 1.

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TABLE 1  
OAXACA DECOMPOSITION OF THE DIFFERENCE IN PREDICTED AFRICAN AND  
WHITE OCCUPATION RANKS

Year	Predicted White mean occupation rank	Predicted African mean occupation rank	difference explained in %	difference unexplained in %
1970	46	27	76.2	23.8
1980	49	31	87.8	12.2

Source: Mariotti, *Labour Markets*, p. 1119.

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The mean predicted occupation rank for Whites increased by three ranks in the observed period, while the predicted mean African occupation rank increased by four ranks. Furthermore, it is particularly important to highlight the change in the percentage of the occupational gap explained and unexplained based on equation 6. The explained component rises, while the unexplained component declines, indicating that observable characteristics such as education played an increasing role in the occupational differences,

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<sup>41</sup> For a more detailed explanation of the procedure, readers are referred to Oaxaca (1973): *Male-Female Wage Differentials in Urban Labor Markets*

<sup>42</sup> Moll, *Discrimination*, p. 295; Mariotti, *Labour Markets*, p. 1118.

<sup>43</sup> Mariotti, *Labour Markets*, p. 1118-1119.

while the role of unobservable characteristics, most notably discrimination played a declining role in the occupational gap between Whites and Africans.<sup>44</sup> These findings are consistent with the work of Moll who uses a similar decomposition method to find that discrimination against Coloured South Africans decreased between 1970 to 1980.<sup>45</sup>

As the relevance of job reservation diminished, the difference in educational attainments replaced the need for statutory job discrimination in the labour market. Discriminatory labour market policies were eliminated, nevertheless evidence for desegregation is absent, as the occupational gap remained, symbolized by the floating colour bar.<sup>46</sup>

#### *Market vs. Pre-Market Discrimination*

As illustrated in preceding sections, market discrimination can take the form of job reservation in the South African context. There are, however, other factors leading to disparities in labour market outcomes.

In their paper on labour market discrimination Carneiro and Heckmann show that the main cause of economic disparities by race and ethnicity in the US labour market lies in individual prerequisites or “endowments” rather than in payments for those prerequisites. Endowments in this context refer to the characteristics or qualities that individuals possess, such as education, skills, experience and other factors that influence their productivity and potential for success in the labour market. Their study has shown that there are significant differences in endowments between different racial and ethnic groups. These initial differences in endowments result in certain populations being disadvantaged and having difficulties obtaining equal opportunities in the labour market. They stress that differences in endowment payments, such as wages or salaries, cannot be seen as the main factor behind economic inequalities. Rather, it is crucial to address the underlying inequalities in endowments to create a more equitable and inclusive labour market landscape and to tackle the issue of pre-market discrimination.<sup>47</sup>

In the South African context, this pre-market discrimination was systematically introduced through the Bantu Education Act of 1953. Black children were consistently given lower endowments in form of education, by ensuring they receive inferior schooling compared to non-Whites. This policy ensured that even in a world without job reservation, Blacks would still be unable to compete with Non-Whites on the labour market, due to insufficient education.<sup>48</sup>

The introduction of the colour bar and the Population Registration Act of 1950 have spurred on the process of segregation and increasingly reinforced disparities between Whites and non-Whites.

In view of this, it is essential to implement policies that not only aim to counteract discrimination in the labour market, but also to eliminate the unequal opportunities even before entering the labour market. It is undeniable

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<sup>44</sup> Ibid., p. 1119.

<sup>45</sup> Moll, *Discrimination*.

<sup>46</sup> Mariotti, *Labour Markets*, p. 1119-1120.

<sup>47</sup> Carneiro and Heckman, *Labour market discrimination*.

<sup>48</sup> Mariotti, *Labour Markets*, p. 1104.

that inequalities exist in terms of education, access to resources and socio-economic background disadvantaging certain groups of the population and limiting their opportunities to successfully enter the labour market. To effectively address these inequalities, comprehensive approaches should be taken. This means that education policies must be developed to ensure equal educational opportunities for all. It requires the promotion of educational initiatives in disadvantaged communities to improve access to quality education and close educational gaps.

## CONCLUSION

There is a consensus in the literature that apartheid had a broad impact on the lives of South Africans. Our paper aims to examine the impact it had specifically on the labour market. We do this by looking at the most profound apartheid policies, focusing on the Job Reservation Act of 1956. Its formal institutionalization developed not on rational economic grounds, but on the grounds of political capture of South Africa's white minority.

It was therefore economic developments that led to the dismantling of these policies. Differences in educational attainment replaced the need for legal job discrimination in the labour market. Even though discriminatory labour market policies were removed, there is no evidence of desegregation as occupational segregation persisted.

We show that the 1953 Bantu Education Act systematically introduced pre-market discrimination as Black children were consistently disadvantaged in terms of education by ensuring that they received inferior schooling compared to non-Whites. This policy was designed to ensure that, even with job reservation not in place, Black people would still be unable to compete with non-Whites in the labour market due to inadequate education.

As Mariotti writes:

“[...] At least until African educational attainment converges to White, segregation will remain in the South African labour market.”<sup>49</sup>

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<sup>49</sup> Mariotti, *Labour Markets*, p. 1120.

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