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Out of Africa: what drives the pressure to emigrate?

Abstract Who intends to leave Africa and what drives people to emigrate? For the cases of Ghana, Senegal, Morocco and Egypt, we examined peoples' stated intentions to emigrate. The large majority wants to move "out of Africa," and the typical potential migrant was found to be young, male, displaying relatively modern values and optimistic about the net benefits of emigration. Signs of positive self-selection were clearly evident in Ghana and Egypt, particularly among women. However, negative self-selection was apparent among Moroccan men. The network effects of potential migrants were found to be fairly important in Ghana and Egypt, but in Senegal and Morocco, such ties play no role in triggering emigration intentions.

Keywords Migration · Intentions · Selection · Networks

JEL Classification F22 · O52 · P2

1 Introduction

Africa is not a continent that raises high hopes among development experts. Gallup et al. (1999) predicted that much of the population growth over the next 30 years would be likely to occur in geographically disadvantaged regions of the world, notably Africa. High fertility rates and low life expectancies tend to be associated with lower rates of saving and investment and therefore slower economic growth (cf. Bloom and Sachs 1998). Hatton and Williamson (2002, 2003a) concluded that emigration pressure in Africa will increase over the next 20 years, primarily because the population age structure will continue to show an increase in the

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number of young adults, and most empirical migration studies show that this age group is relatively more inclined to try their luck elsewhere than older age groups. The lack of economic growth prospects in Africa will only reinforce emigration pressure. But Africa has not always been in its present dismal state. In the 1960s and early 1970s, Africa's future looked bright, but during the 1970s the economic and political situation in Africa deteriorated (Collier and Gunning 1999). Since 1980, aggregate per capita GDP in sub-Saharan Africa has fallen by almost 1% a year, and today, sub-Saharan Africa is the lowest-income region in the world. To many African citizens, emigrating "out of Africa" seems to be the only way to improve their standard of living.[1]

The above-mentioned analyses and "guesstimates" are primarily based on aggregate statistics, and little is known about the micro-economic causes and incentives that trigger migration in Africa, although not much is needed to imagine that the pressure to emigrate is real. This lack of knowledge is a cause for concern because governments of destination countries are increasingly focusing on how to keep migrants out without considering the actual roots of the emigration pressure. Migration and development policies might have a better chance of succeeding if both sides of the migration story, the circumstances in both the countries of origin and of destination, were taken into account (cf. Rotte et al. 1997; Vogler and Rotte 2000), and one can understand why Borjas (1994) claimed that "an assessment of the economic impact of immigration requires an understanding of the factors that motivate persons in the source countries to emigrate." This is precisely the issue that will be examined in this paper. We will focus on the issue of who intends to leave and who will stay behind in a number of African countries (Ghana, Morocco, Senegal and Egypt). This is an issue that lies at the very heart of the debate about the causes and effects of the so-called "brain drain" or, more generally, the size and structure of the South–North migration flow. It is important that both the destination and source countries have an understanding of (1) how high the migration flow is and (2) who intends to emigrate, because emigration will affect the age and sex structure of the population at large and the educational and skill composition of the labour force.

By using international migration surveys for these four countries, we have been able to show how high the pressure to emigrate is and what kind of forces are at work when people form emigration intentions. Because migration is a volatile event which is hard to predict, an understanding of the emigration intentions of people from developing countries can help put the previously mentioned migration predictions into perspective. But in addition to using migration intentions as predictors of future emigration flows, we believe emigration intention data can also be used as indicators of a country's state of affairs, representing, as they do, a vote of (no) confidence in the future of the home country vis-à-vis other countries.

Although we were obviously not the first to examine international migration intentions (cf. Burda et al. 1998; Faini 1999; Papapanagos and Sanfey 2001; Drinkwater 2002; Liebig and Sousa-Poza 2004), our research does contain two novel elements that can be added to the empirical literature of intentions. First of

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[1] During the process of writing this paper, we discovered that we were not the only ones who had used the film title "Out of Africa" as the title of a paper. Kuyvenhoven (1997) and Hatton and Williamson (2003a,b) used this title before we did, and the credit for using this title should go to them. We have, however, retained the title because it is such an apt description of the phenomenon of African emigration: the majority of emigrants long to move "out of Africa".

all, it brings together micro-data about emigration intentions in a number of African countries (Ghana, Senegal, Morocco and Egypt) that differ quite distinctly in terms of geographical position, state of economic development and cultural setting. The speculations and aggregate predictions that are often made about the African continent are not based on micro-evidence, and, as such, this article is, as far as we know, a first attempt at filling that void.

Secondly, when modelling emigration intentions, we focused on both the structural characteristics that trigger self-selection and push potential migrants, and on the variables that pull potential migrants towards the country of destination. Using this method to model migration may well be standard practice when estimating actual migration, but the simultaneous inclusion of push and pull factors within the economics literature that uses emigration intentions is not often found. For example, in works by Papapanagos and Sanfey (2001), Liebig and Sousa-Poza (2004) and Drinkwater (2002), expectations played no role at all, and they concentrated solely on the structural characteristics of potential emigrants.

The use of expectations is obviously fairly standard practice in social–psychological work that draws on Ajzen (1988)'s theory of planned behaviour. In such studies migration is seen as a decision-making process in which the future attainment of valued goals in the home community (the "stay" decision) is evaluated against the attainment of those goals in alternative locations (the "move" decision). Work, particularly by De Jong (see, for instance, De Jong 2000) should be mentioned in this context because his work has incorporated expectations about a variety of factors. De Jong (2000), for example, showed for the case of Thailand that expectations about a variety of aspects of the destination (standard of living, comfort and social support network) and family norms about migration were major predictors of people's intentions to move, particularly in the case of women. However, his work concentrated primarily on internal migration in developing countries and therefore provides no comparison for our work, which focuses on expectations from the perspective of international migration. Moreover, when estimating intentions, we purged any effects that structural individual characteristics might have on the expectations about the net benefits of migration and constructed a variable that approximates the individual-specific optimism associated with these benefits. As will soon become clear, individual optimism about the benefits of migration were found to be the prime driving force behind emigration intentions. Whether optimism is equivalent to overconfidence or overshooting remains unclear at this point because our concern was with intentions rather than actual behaviour. But the fact that great expectations were found to have such a profound impact on intentions can perhaps provide a very simple explanation as to why it is so hard to redress South–North migration flows.

After this introduction we will begin, in Section 2, by briefly discussing the theory behind emigration intentions and the role that expectations play in this regard. We will then turn to the Section 3, where the background of the survey will be presented together with some salient stylised facts about the four African countries. In Section 4 we will expand briefly on the method of estimation we used and the model we estimated. In Section 5 we will present the estimation results for the four African countries, and in Section 6 we will test the robustness of these results by examining the intentions of both men and women. In Section 7 we will conclude our paper with a summary of the main conclusions.

2 The theory behind emigration intentions

The basic economic theory of migration[2] states that differences in (expected) net returns across countries are the prime driving force behind emigration movements. A migrant with skill level S who moves from a poor country (denoted by a P) to a rich country (R) will compare the two income levels he[3] might receive. In the poor country he knows what he currently receives and what he will probably receive over the remainder of his lifetime, viz. $E[W_P(S)]$, and he expects that the wage for a worker with comparable skill level S in the rich country receives $E[W_R(S)]$, where clearly, $E[W_R(S)] > E[W_P(S)]$. Income flows were discounted to compare this future income flow with his present wage. However, when deciding to migrate, the potential migrant subtracts from his expected wage the costs $C(S)$ associated with moving abroad. These costs can be split up into explicit, one-off migration costs (transport, legal documents etc.) and indirect, but nonetheless important, costs associated with migration, such as the emotional costs of leaving family and country, net social security benefits or taxes, adjustment costs in the country of destination and so on. There can of course also be costs associated with immigration policies that the potential migrant encounters. The points systems used by countries such as Australia, New Zealand and Canada, where age, language fluency and education are important selection criteria for gaining entry to these countries, can represent considerable costs because potential migrants will have to invest, for example, in education to be able to earn the threshold number of points for obtaining a visa. Taking all relevant variables together, the individual living in a poor country will migrate as long as:

$$E[W_R(S) - C(S)] > E[W_P(S)] \tag{1}$$

When emigration decisions are being made, there are processes at work that would appear to lead to self-selection among migrants because the net benefits of migration are not the same for everyone (see Chiswick 1999), and when predicting who will emigrate, it is important to consider what the structure of information asymmetry looks like across migrants and across potential employers in the country of destination. This element is the main focus of attention in the theory of adverse selection, which basically boils down to the proposition that, if asymmetric information is present and signalling or screening by market participants is absent, then only "poor quality" products are traded in equilibrium. As Katz and Stark (1987) showed, this theory can easily be applied to the issue of migration, in which case the proposition would be that in the absence of signalling or screening, only the lowly skilled or lowly educated would emigrate. Signals such as education and screening by employers obviously play a role in terms of obtaining employment abroad, thereby leading to more complex migration flows in which, for example, only the highly skilled and lowly skilled migrate (Katz and Stark 1987). The theory of adverse selection focuses on the information asymmetry between employers and employees.

[2] Pioneered by Sjaastad (1962) and later extended by economists such as Bhagwati (1975), Mincer (1978), Simon (1989), Borjas (1994), Stark (1991) and Chiswick (1999).
[3] We have used the male notation for a typical migrant in this section not just for the sake of convenience but primarily because most of the empirical migration literature indicates that men are often the ones who initiate the decision to emigrate.

One shortcoming of the analysis by Katz and Stark (1987) is that it does not deal explicitly with the formation of migrants' expectations about prospective wages or income levels abroad. When taking decisions, potential migrants have to form expectations, and our hunch is that some of the migration flows out of Africa can be explained by focusing on the formation of these expectations. Expectations offer the possibility of overshooting or undershooting in migration. For example, the existence of a migration culture in which everyone intends or plans to emigrate can simply be the result of expectations that are out of touch with the actual circumstances abroad. An overoptimistic population might, for example, result in an excessive number of migrants leaving the country. Take a look at Fig. 1, where net wage curves are given under conditions of complete certainty in such a way that migrants with skill level S and higher will leave the country because at that point, $W_R - C > W_P$.

However, if expectations are such that wage expectations across the entire population in the source country are shifted upwards towards W'_R, then in those circumstances, potential migrants can be found in the pool with skill level S' and higher (where $S' < S$). In other words, the pool of migrants leaving the country would be undereducated or underskilled and, within this simple framework, the group $(S-S')$ would be disappointed because their actual wage in the destination country would be less than their expected wage.[4] One can even imagine situations in which wage expectations are so high that the entire population, regardless of their skill levels, would be eager to move abroad. Optimism is obviously bound to differ between one individual and the next, and the assumptions that need to be made to assume that a genuine migration culture exists are quite stringent. Much depends on issues of self-selection and on the height and slopes of the relevant net wage curves, and it is therefore unfortunately not possible to predict on a priori grounds who will migrate and who will stay. The only way to shed light on the characteristics of potential migrants is by using empirical evidence.
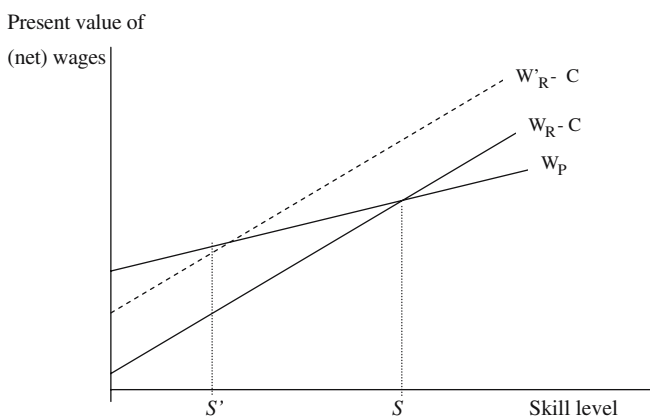

Fig. 1 Migration, expectations and self-selection of skilled migrants

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[4] This relates to work by Tunali (2000) who showed that in Turkey, migration was viewed as a "lottery": for a substantial proportion of migrants, the estimated gain of moving was negative, and only a minority of movers achieved very high returns.

2.1 Intention theory

In this study we have not used revealed emigration behaviour, but we have focused instead on stated emigration intentions. Using intentions as a means of approximating future emigration decisions is a reasonable research strategy as long as one is aware of the pros and cons of using such stated preferences. One clear advantage of using migration intention data is that it allows self-selection theories to be tested without having to deal with the sort of sample selection problems that are associated with host-country data. Quite a few of the studies that test for self-selection among migrants rely on host-country data and, as Liebig and Sousa-Poza (2004) pointed out, this sort of approach can become problematic because specific host-country characteristics such as migration policy, historical links and geographical proximity are bound to bias immigration to these countries.

Most researchers who use intention data refer to the so-called "theory of reasoned action" formulated by social psychologists (see Fishbein and Ajzen 1975; Ajzen 1985, 1988) as their basic frame of reference. This theory revolves around the hypothesis that a person's intention to undertake a certain action (e.g. making investments, joining the labour force, giving up smoking etc.) is a function, among other things, of their beliefs about the consequences of taking that action. In the case of emigration, this implies that the person makes a mental map of the costs and benefits associated with the decision to emigrate. The decision to migrate becomes a real option in the minds of non-migrants when the present value of benefits exceeds the present value of costs, and, in that respect, intention theory is not that different from economic theory, albeit that the social–psychological factors that impinge on decision-making are far greater and more difficult to explicate.

Working with intention data requires a degree of caution because the analysis of intentions is riddled with difficulties and pitfalls that can be hard to reconcile if the aim is to use intentions as predictors of future behaviour. The framing of questions, it matters whether the question is open-ended or whether it is a "forced choice" question, and the fact that the information available at the time when people form their intention, and the information they possess when the actual steps are taken may differ substantially, are good reasons to interpret intention data with care. Unfortunately, the available data do not allow us to test the relationship between intended and actual decisions. Still, as Manski (1990) makes clear in a short review on the subject, intention data do convey information about subsequent behaviour, and at most, one can estimate the bounds so as to test the best-case hypothesis, i.e. the respondent has rational expectations, and their responses to questions are best predictions of their future behaviour. Moreover, social psychologists are fairly confident about the applicability of the relationship between intentions and actions. The so-called theory of reasoned action (Ajzen 1985) "permits highly accurate predictions in a variety of behavioural domains," but caution has to be exercised when making this claim because not every decision fits the problems social psychologists refer to. The tacit assumption behind the theory of reasoned action is that, barring unforeseen events, people are expected to act rationally and in accordance with their intentions. Another assumption is that individuals feel that they have control over what lies between their stated intention to move and the actual move abroad (i.e. their so-called self-efficacy). In other words, they believe they can "make things happen."

Intentions do, of course, can change over time, not just because of preference drift, but primarily because circumstances, and therefore expectations, change. The accuracy of predictions based on intentions will probably be an inverse function of the time interval between measurement of intention and observation of the intended behaviour. This is particularly relevant in the case of migration. For example, voting for a specific politician or watching a specific television programme are decisions that are easily taken and that span a short horizon, whereas the level of volitional control in the case of emigration may be extremely low.

Most studies on migration intentions (De Jong et al. 1996; Sandu and De Jong 1996; De Jong 2000; Fawcett 1986; Hughes and McCormick 1985; Gordon and Molho 1995; Lu 1999; Yang 2000) focus on internal or regional migration because it is relatively easy to trace such migrants for follow-up surveys to check whether they have realised their intentions. The results of these studies are encouraging. In his study of Thailand, De Jong (2000) showed how the intention to migrate can be a powerful predictor of the actual decision to emigrate permanently. Although little is known about the extent to which intentions to move abroad lead to actual migration, one can imagine that the gap between intention and action will be large, or at least larger than for internal migration data. Prospective migrants need not only the resources to finance their move abroad, but also need to overcome formal barriers such as obtaining visas, residence permits and/or work permits—legal documents which are increasingly difficult to obtain. Gardner et al. (1986) presented some evidence that potential international migrants in the Philippines who had failed to realise their intentions had mainly been thwarted by legal migration hurdles. Intentions to migrate internationally therefore seem to reflect a willingness to respond to opportunities in the realisation that such opportunities may be few and far between and may disappear rapidly.

2.2 Modelling intentions

Most international migration intention studies are based on an examination of the structural characteristics (age, sex, marital status, education and profession) of potential movers and stayers. Comparing results across studies would be virtually impossible because every study takes a different tack, employs different methods and uses different theories to shed light on migration intentions. It is also unfortunate that there is a shortage of research based on African data which would enable us to compare results.

However, one overall conclusion about intentions to emigrate that can be drawn is that these intentions are significantly more prevalent among young (and single) men. Being unemployed or educated is an added incentive to seriously consider moving abroad, although these results did not emerge for every country. Papapanagos and Sanfey (2001), for example, used the Central and Eastern Europe Eurobarometer of 1992 to examine emigration intentions in Albania in particular and, as was to be expected from a country in turmoil, the willingness to move abroad was extremely high, particularly among the men: more than 70% expressed an intention to move to Western Europe compared with just over 50% of the women.

It might be useful to compare these intentions with some more recent research, as found in papers by Drinkwater (2002) and Liebig and Sousa-Poza (2004). They

used the 1995 International Social Survey Programme (ISSP) to shed some light on the willingness to move of residents from developed Western countries and from Central and Eastern European Countries (CEEC), and they produced the relatively surprising result that the willingness to move abroad was lower in the CEEC than it was in the EU. This is surprising because it is in marked contrast to the figures presented in Papapanagos and Sanfey (2001) in the early 1990s and because the scheduled enlargement of the EU is thought to have been based on an assumption that there will be large-scale migration flows (see, e.g. Blanchard 2002). It should also be noted that the EU population is not particularly known for being highly mobile (see, e.g. Faini 1999). However, with hindsight, it may be quite easy to explain why these researchers found such diverging results; the question posed in the ISSP questionnaire captured the residents' willingness to move ("Would you be willing to move to another country to improve your work or living conditions?"), whereas Papapanagos and Sanfey (2001) asked about the probability of moving ("How likely is it that you will move to western Europe?"). It goes without saying that willingness to move is a concept where commitment is rather low, unlike intention to move, which forces respondents to make at least some (weak) form of commitment.

2.3 ...and expectations

Apart from other structural characteristics, we believe that expectations about the costs and benefits associated with moving abroad are crucial to understanding the formation of emigration intentions. O'Connell (1997) showed that predictions about migration under conditions of uncertainty were quite sensitive to the structure of information and the type of uncertainty that was assumed. Broadly speaking, there are two types of uncertainty that are important to a potential migrant's decision-making: uncertainty about (1) current conditions in the destination country that may not be observable, and (2) the future development of conditions in both the source and destination countries. The first type of uncertainty may trigger so-called speculative migration, where migrants will just try their luck in foreign labour markets. The other type of uncertainty, about future net benefits, may discourage migration because migrants may just wait and see, i.e. they will wait until some of the uncertainty has been resolved. O'Connell's theory offers a plausible theory about why not everyone migrates in the face of diverging wage developments. Empirical tests of this theory are few and far between, although the work by Burda et al. (1998) can be seen as an exception to the rule. They studied East–West German migration intentions and focused on the opportunity costs of migrating today instead of tomorrow or in the distant future. The theory behind the option value of waiting is that individuals do not immediately move in response to observed wage differentials because of uncertainty about future wage levels. It may well be best to wait and see and postpone migration until some of the uncertainty at home and at the destination has been resolved. Burda et al. (1998) showed how the effect of income on migration intentions forms a U-shape, which they interpreted as an effect that was compatible with the option value theory, but that can also be accounted for by the constraints of having to borrow money to finance one's move

abroad. They acknowledged the exploratory nature of their work and the need for more information in estimation to identify which forces are at work and which individuals they affect. Our work can be seen as complementary to this type of work because we explicitly included expectations about the net benefits of migration. It would, however, be impossible to replicate their work because income was not recorded as a continuous variable in the countries surveyed, and income is a far more diffuse concept in Africa than it is in highly developed countries.[5]

3 Data

3.1 Migration survey

To assess motives, expectations and intentions to emigrate, we used special-purpose migration surveys. During 1997 and 1998, international migration surveys were carried out in a number of developing countries with a view to examining the forces that push potential emigrants out of a country or pull potential emigrants towards specific countries, in particular, countries in the European Union[6]. For the purpose of the project, primary data were collected on individuals, their households and their communities in a number of countries, with the focus being on South–North flows to the European Union. Seven research teams coordinated by the Netherlands Interdisciplinary Demographic Institute (NIDI) and located in Mediterranean and west African countries participated in the project. The countries in question were predominantly the migrant-sending countries of Turkey, Morocco, Egypt, Senegal and Ghana, and the newly immigrant-receiving countries, Italy and Spain. In this article we will focus only on the four sending countries in the African continent:

Morocco This is a country with a long tradition of emigration to Europe. The emigration of Moroccan workers has been ongoing since the 1960s, with the majority heading for France, which recruited several tens of thousands of unskilled workers over a period of 15 years. Other European countries such as Belgium and the Netherlands, and to a lesser extent, Germany, have also sought to recruit Moroccans. This emigration fitted in with the Moroccan government's strategy for coping with high unemployment whilst at the same time benefiting from the migrants' remittances. After the recruitment of so-called "guest workers" ceased in the early and mid-1970s, migration flows continued due to family reunification and family formation (by marriage). The attachment of Moroccan emigrants to their country has generally not diminished, and the strength of family ties also explains the emergence of migration networks which have made it possible to maintain migration to EU countries in spite of the stricter immigration controls instituted by host countries to control these flows. The worries that host country (European) governments have about the emigration of Moroccans seem to be justified because Moroccan capabilities and values do not seem to be in tune with the Western world: illiteracy rates are high, particularly among women, and the official language is

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[5] O'Connell's theory cannot be tested either because we asked respondents directly about their expectations and not their assessment of the uncertainty associated with their expectations.
[6] For an extensive description of the surveys, see Schoorl et al. (2000).

Arabic. Virtually all Moroccan citizens belong to either the Arab or the Berber ethnic group, and almost all are Muslims.

Egypt Emigration has always been much more important to Egypt than immigration. At the time of the survey it was estimated that about two million Egyptians lived abroad. Economic motives are dominant in triggering migration. From the mid-1960s to the mid-1970s, it was mostly unskilled rural workers who left Egypt. In more recent times, when Saudi Arabia became their favourite destination, the proportion of skilled migrants increased markedly. The educational level in Egypt remains low, particularly among women. Illiteracy rates among women are still very high (61% in 1995) and tend to be concentrated in the poorer rural areas. Ethnic groups are predominantly Egyptians, Bedouins and Berbers. The vast majority of the population (94%) is Muslim, mostly Sunni. Arabic is the official language. The pressure to migrate is high in Egypt because living standards are fairly low, and the lure of the West and the Gulf states will keep the pressure going. The importance of remittances to Egypt's economy has increased tremendously because they are by far the largest source of "foreign" income.

Senegal Senegal is a former French colony which gained independence in 1960. Although few estimates of international migration flows to and from Senegal suggest a zero net migration balance, it would seem more appropriate to assume that Senegal faces a negative migration balance, bearing in mind its low level of development and poor future prospects. The population of Senegal incorporates a diversity of ethnic groups. The largest of these include the Wolof (44%) and the Fulani and Tukulor (24%). French is the official language of Senegal, although Wolof is the most widely understood of the many African languages. The large majority of the population is Sunni Muslim (90%), and about 6% is Christian. The state of development of Senegal is even worse than that of Morocco and Egypt. Senegal is predominantly agricultural (70% of the labour force), and illiteracy rates are astoundingly high: three out of every four women aged 15 or older cannot read or write. Although education is compulsory in Senegal, actual attendance rates are low, and child labour is fairly high (30% of all children aged 10–14).

Ghana Ghana reveals a quite different story compared to the previous three countries. It used to attract many migrants from other African countries to work in cocoa production, but due to structural economic downturns, it has now become a major emigration country. It is estimated that about 10% of the Ghanaian population live abroad, particularly in Nigeria. Ghana is also more ethnically diverse than, for example, Morocco, because there are six main ethnic groups, of which the Akan (Ashanti and Fanti) are the most numerous group. Ghana seems to be more in tune with modern values than the other observed countries because half of the population is Christian, English is the official language and the government is dedicated to sharply reducing the illiteracy rate.

To return to the set-up of the migration survey, in principle, all members of a household aged between 18 and 65 were eligible to be interviewed, including those who were living abroad at the time. Information about current migrants who were not present at the time was gathered using proxy respondents. The selection of the sending countries was based on our desire to capture typical migration flows in the region spanning the southern and eastern Mediterranean and sub-Saharan Africa.

Other selection criteria included the existence of a varied destination pattern of migrants and different histories and colonial ties.

To facilitate the interviewing process, to study chain migration and to minimise the difficulties of finding international migrants in the countries of emigration (a problem not dissimilar to finding a needle in a haystack), the sample designs were targeted at specific regions. Using expert knowledge, several regions were selected in each country depending on the level of development (relatively low vs relatively high) and the history of migration (long-established vs fairly recent). Regions characterised by very limited international migration were not included. Within the regions chosen, multistage, stratified cluster samples of migrant and non-migrant households were taken. As a consequence of regional sampling, it should be noted that the results of the study do not reflect migration from the countries as a whole but only from the regions selected.[7]

3.2 Descriptive statistics and empirical puzzles

We will begin by presenting some statistics on emigration intentions for the four African countries to convey a sense of the importance of the phenomenon and the differences across the countries. For the purpose of this paper, the key question in the survey was one which probed the intentions of respondents who had never emigrated before: "Do you intend to migrate abroad?" The possible answers were "yes," "no" and "don't know." Respondents who replied in the affirmative were asked to indicate their intended departure period and to indicate whether they had taken steps to obtain the necessary documents (passports, visas, residence or work permits etc.). In addition to these emigration intention questions, respondents were asked to state their main motivation for emigrating and their preferred country of destination. Table 1 summarises the main motives for migrating or staying, and intentions among non-migrants, i.e. people with no international migration experience. Return migrants were excluded from our study.

As can be seen, there were clear differences in emigration intentions between the four countries. It is worth noting that the intention to emigrate was particularly high among Ghanaians and Senegalese, whereas emigration intentions in Egypt were low. The main reason for this can be traced back to the stated motives to stay, among which family ties figured prominently. Another reason might be because these figures do not reveal the fact that the sex composition of the groups under

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[7] In Morocco, the survey was carried out in the regions of Nador in north-eastern Morocco and in the less developed southern region of Tiznit, both of which are characterised by a long migration history, and in the more recent migration areas of Larache (northwest Atlantic coast), Settat (near Casablanca) and in the less developed region of Khenifra in the dry and mountainous south. In Ghana, the regions studied included the developed regions of Greater Accra and Ashanti, the latter characterised by more recent migration patterns; and the less developed regions of Eastern and Brong Ahafo. In Senegal, the urban and relatively developed region of Dakar/Pikine was chosen, as was the semi-rural and less developed region of Diourbel/Tourba, both characterised by relatively recent migration patterns. The two regions together account for roughly one third of the country's population. And finally, in Egypt the following large regions were selected: Cairo and Alexandria (developed, established migration), urban upper and lower Egypt (developed, with recent migration patterns), and rural upper and lower Egypt, both less developed regions, the former with more established migration flows than the latter. For more details see Schoorl et al. (2000).

Table 1 Who wants to emigrate (or not) and why?

	Potential emigrants from (%):			
	Ghana	Morocco	Senegal	Egypt
Intention to migrate	41	20	38	12
Motivation to emigrate				
Economic reasons	79	91	89	83
Family reasons	5	5	3	9
Other reasons[a]	15	5	8	8
Total	100	100	100	100
Motivation to stay				
No financial needs	10	33	6	9
Lack of means	23	4	14	1
Family reasons	23	30	40	64
Other reasons[b]	45	32	40	27
Total	100	100	100	100

Source: Schoorl et al. (2000) and weighted data
[a] Other reasons refer to education, adventure, fear of persecution, etc
[b] Other reasons refer to old age, legal problems of emigration, do not like living abroad, etc

consideration differed markedly. The intention to move abroad was significantly higher among men than women. More specifically, the intention to move was highest among men from Ghana and Senegal, where approximately 50% of the male respondents indicated that they intended to emigrate. Moroccan and Egyptian men were less set on migrating, with 33 and 21%, respectively, saying that they intended to emigrate. Women were less adamant in their intentions: only 4% of the (non-migrant) women from Morocco and Egypt stated that they intended to emigrate, whereas Ghanaian and Senegalese women were more eager to move abroad, 37 and 26%, respectively.

3.2.1 Economic motivation

The next question that was raised in the questionnaire was "why do you intend to emigrate?" The main answers pointed unequivocally to economic motives, underlying the intention to emigrate in these countries. The reason for stating these motives are, of course, rooted in the present-day economic circumstances and expectations, but it was quite difficult to establish which economic factor was dominant. Poverty might have been a driving force, or it might have been the fact that people expect migration to be a financially profitable move. Poverty is, however, an ambiguous explanatory factor because, although insufficient means may well be a reason for emigrating, they can equally well be a barrier to moving because liquidity-constrained individuals cannot afford the costs of emigration. On the other hand, the financial appeal of emigration is both plausible and unambiguous because the income gap between the industrialised world and the developing world only seems to have increased over the years. If we look at the gap between GDP per capita in the countries under consideration and that of, say, the average US citizen (see Fig. 2 below), one can understand why the lure of "going
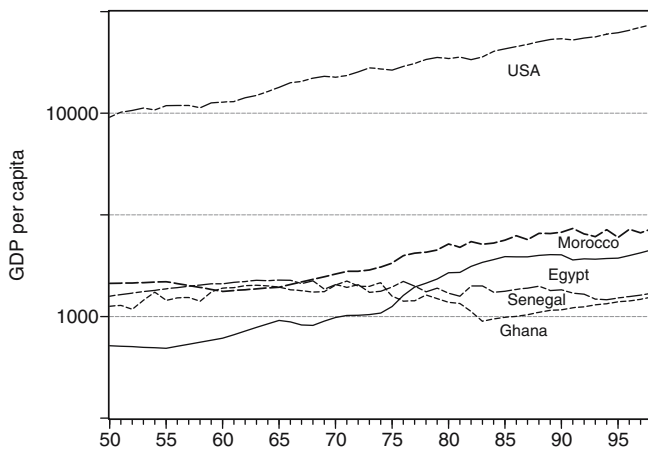
Fig. 2 GDP per capita, US vs African countries, 1950–1998 (1990 dollars, logarithmic scale)

West" (USA) or North (Europe) would be a real driving force for most respondents. The gap between Africa and the developed world (represented in the figure by the US) was already large 50 years ago, but in the meantime, the gap has only widened, making migration an ever more likely step for these citizens. Macro-economic studies on international migration by Hatton and Williamson (2003a) and Vogler and Rotte (2000) make clear that the income differential is an important driving force particularly for Africans.

The per capita income of US citizens today is more than 20 times higher than per capita income in Ghana and Senegal, whereas over almost half a century ago, the income gap between the US and these countries differed by a factor of eight. Egypt and Morocco have a slightly better track record, although they also have shown no signs of "catching up" over the past 50 years.

3.2.2 And women?

Micro-economic motives tended not to be as important for the women, who were more inclined than the men to cite family reasons as an important motive for emigrating. Women from the Muslim countries of Morocco and Senegal had traditionally migrated mostly within the context of family reunification or to marry a compatriot who was already residing abroad. This option was, for the most part, closed to Egyptian women because their husbands were more likely to live in the Gulf region where family reunification is the exception rather than the rule. Ghana proved to be an exception, with differences between men and women being negligible; the intentions of both men and women were dictated primarily by economic reasons. Ghanaian culture does not frown upon women migrating alone to the extent that the other three Muslim societies do, and this, combined with the greater likelihood of financial independence of women in Ghana, is likely to influence their migration perspectives and intentions.

Overall, the results of the migration surveys confirmed that the economic motive was important to the respondents in the African countries as shown in Table 1.

Most of the men cited economic grounds as their primary reason for intending to move abroad, whereas the women were influenced by a mixture of family and economic reasons. "Economic reasons" is, however, quite a broad category of motives, and it can mask the influence of education, unemployment, poverty, wealth and job search costs, to name just a few elements that form part of economic theory. To unravel this motive, we attempted to distinguish between the separate effects of the most common elements of economic theory.

3.2.3 Preferred country of destination

In addition to information about intentions, the survey also asked for information about the respondents' preferred country of destination (see Table 2), and it was clear that the preferences of potential migrants were fairly different across countries but not so much within countries. Ghanaians and Senegalese by and large preferred the US as their ultimate destination, whereas Egyptians were clearly oriented towards the Middle East, and Moroccans had their minds set on Mediterranean countries in Europe (Spain, Italy and France). These intentions partly reflect the destinations of recent emigrants, although the US tends to be somewhat more favoured among potential emigrants.

To give an idea of how little the preferences differed between the four countries, Table 2 provides some interesting statistics on the geographical concentration of the preferred countries of destination. Two-thirds of the group of potential migrants (among the non-migrants) expressed an interest in one of the top three destination countries. Another interesting finding was that the European Union (EU-15) seemed to be an attractive country of destination for potential migrants from Morocco, but one which had only moderate appeal to respondents from Senegal and Ghana (50% chose it as their preferred destination), whereas interest in the EU among Egyptian respondents was very scant indeed, with only 13% expressing some interest in it as their preferred destination.

A potential factor that might explain this conformity of emigration preferences is the presence of a social network (having relatives abroad or knowing former migrants). Although the potential migrants were a subgroup who had expressed an interest in emigrating, and thereby a preference for a country of destination, it stands to reason that social networks might also trigger emigration intentions and

Table 2 Top three preferred countries of destination

Popularity of preferred country of destination	Potential migrants from			
	Ghana	Morocco	Senegal	Egypt
First place	USA	Spain	USA	Saudi Arabia
Second place	Germany	Italy	Italy	Kuwait
Third place	UK	France	France	United Arab Emirates
Cumulative percentage (no. 1–3)	65	67	69	71
Cumulative percentage (EU countries)	44	98	48	13

Source: Schoorl et al. (2000), weighted data and own calculations

help to explain the displayed conformity of destination choice. Networks also play a crucial role in actual migration decisions, and we were interested to see whether this would also apply at the intention-forming stage.

3.2.4 How firm are migrants' intentions?

Before we go on to examine the survey data in greater detail, there is one final aspect of the data that should be mentioned. It concerns the firmness of the respondents' intentions. At this stage, it might be tempting to predict a large outflow of migrants from the surveyed countries in the near future, but having intentions and putting them into practice are two entirely different things. In other words, a simple yes or no answer to the question of whether one intends to move abroad does not provide a firm foundation for predicting a forthcoming migration move. Respondents who answered yes may not be sure if or when they will actually emigrate, or they may be fairly sure about the timing of their move but may not yet have taken any concrete steps.

Table 3 sheds some light on how firm the respondents' intentions to emigrate were. Potential migrants from Ghana seemed to be the most adamant about effectuating an intended move, whereas respondents from Senegal were less adamant about their move. Most striking of course was the large difference between general intentions and actions taken. This can be partly explained by the fact that people tend to migrate as soon as they obtain the necessary documents and funding, therefore leaving little chance of them being included in the survey. It is also indicative of the large discrepancy between migration intentions and migration behaviour as a result of the obstacles people face when moving abroad.

The descriptive statistics behind the intentions to move out of Africa produced some empirical puzzles which we will examine in the next few sections. We were primarily interested in who leaves and who stays, and to get to grips with this question, we will address several issues. Firstly, whether, and to what extent, push or pull factors were responsible for triggering the high emigration intentions. Secondly, whether self-selection effects were present at the intention-forming stage, i.e. whether the more highly educated were more eager to emigrate than the population with no formal education or with only primary education or whether it was the other way around. Thirdly, although we know from actual migration decisions that social networks play a crucial role in facilitating migration, one question in the migration literature that remains unresolved is whether social networks play a similar role at the stage when intentions are being formed.

Table 3 How firm are the intentions to emigrate?

	Potential migrants from (%)			
	Ghana	Morocco	Senegal	Egypt
Intention to emigrate	41	20	38	12
Intention to emigrate within 2 years	13	4	5	1
Has taken actual steps to emigrate	8	3	2	0

Source: Schoorl et al. (2000) and weighted data

4 Estimation model

4.1 Method of estimation

To deal with the fact that the respondents' migration intentions varied in intensity, as shown in Table 3, we used ordered probit analysis. Ordered probit is an appropriate estimation technique when the dependent variable is categorical and ordered. For instance, when people are asked whether they intend to emigrate and they respond with a yes, they may not be able to accurately say when they will emigrate, but they can surely indicate whether they are unsure about it or whether moving abroad is a highly likely event. In other words, they can rank their probability of moving abroad. In ordered probit analysis, an underlying score is estimated as a linear function of the independent variables and a set of threshold points. The probability of observing outcome i (e.g. the intention to emigrate within a year) corresponds to the probability that the estimated linear score function $S_j = \beta_1 x_{1j} + \beta_2 x_{2j} + \ldots \beta_k x_{kj}$ plus the random error u_j, is within the range of threshold points estimated for the outcome:

$$\Pr\left(outcome_j = i\right) = \Pr\left(\kappa_{i-1} < \sum_{s=1}^{k} \beta_s x_{sj} + u_j \leq \kappa_i\right) \tag{2}$$

where the error term u_j is assumed to be normally distributed. With ordered probit analysis, the model coefficients are estimated $\beta_1, \beta_2, \ldots \beta_k$, along with the threshold points $\kappa_1, \kappa_2, \ldots \kappa_{H-1}$, where H is the number of possible outcomes. To explain the emigration intentions, we used three threshold points because there were only four possible outcomes for constructing the intention to migrate, namely:

(1) No intention to move abroad;
(2) Intends to move abroad, but unsure when;
(3) Intends to move abroad, but not for at least a year; and
(4) Intends to move abroad within a year.

The intention question also included a "don't know" option, but this outcome category was left out of the analysis because it is hard to rank this category unambiguously, and our interest was mainly in those respondents who expressed fairly clear intentions.

The estimated threshold points guide the interpretation of the estimated coefficients because they indicate how important a variable (e.g. a character trait of non-migrants) is for predicting the likelihood of moving abroad. For instance, for each observation j, one can calculate the score function (S_j) and the true frequency that individual j will not migrate if $S_j + u_j \leq \kappa_1$, and that he or she is unsure about the move abroad, $\kappa_1 < S_j + u_j \leq \kappa_2$ etc. One can therefore predict, based on the estimated coefficients, the likelihood of a particular emigration intention outcome.[8]

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[8] To obtain robust variance estimates, we also controlled for possible interaction effects in the formation of intentions within households in the sample. The estimation method therefore relaxes the assumption of the independence of observations and requires only that observations are independent across clusters: in our case, households (White, 1980). All standard errors in this paper were corrected for this clustering effect.

The covariates x_j include push and pull factors of migration. The push factors are the structural characteristics of the potential migrant, and these are generally used in most migration intention studies. The pull factors in our study were the respondents' expectations about the net benefits of emigration. Because these variables played an important role in our estimation results, some additional comments are warranted. It is highly likely that these expectations were to some extent dependent on the characteristics of the respondents. To cope with the independent effect of optimism on the intention to emigrate, we used a two-step estimation method to separate the push (characteristics of the respondents such as education, age and sex) and pull (expected net benefits) aspects more clearly.[9] In stage 1, we regressed the list of characteristics of the variables describing the expected benefits and costs of emigration. In stage 2, the residuals from these regressions were entered together with the variables describing structural characteristics in a regression that explained the intention to emigrate. The residuals from the first stage, i.e. the difference between actual and predicted expectations, can be interpreted as individual-specific degrees of optimism or pessimism because they have been purged of the characteristics that might be expected to determine the individual's costs and benefits from emigration.

4.2 Explanatory variables

To examine the driving forces behind the emigration intentions, we used a number of explanatory variables that approximate theoretical concepts that are often used in migration and intention theory. Table 4 presents the descriptive statistics of the variables included in our estimations for respondents who had no experience of international migration (non-migrants). The variables were primarily individually based, but variables were also constructed at the household level such as income and household connections with (former) migrants.

The striking aspect of Table 4 is the variation in the answers of the individual characteristics of the population sample across the four countries, the only exception to this rule being expectations about the financial gains associated with migration: in every country, the vast majority (63–80%) of the various populations expected emigration to be a profitable move.

To focus on the most noticeable cross-country differences in Table 4, the sample populations in Egypt and Ghana was relatively highly educated compared to the populations of Morocco and Senegal, where approximately 75% of the respondents had no formal education whatsoever. There was also a fairly marked difference in the migrants' household income position, with 70% of the non-migrants from Ghana and Senegal finding their income barely sufficient or actually insufficient to buy daily necessities. The current work status of the respondents differed quite distinctively across the four countries, a fact that seemed to be driven primarily by the sex composition of the sample population, because in Ghana, Senegal and Egypt, the population was dominated by women, and it was only in

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[9] We would like to thank an anonymous referee for pointing this problem out to us. However, we also ran separate regressions with the expectations questions, used in a direct manner, and these results differed only marginally from the two-step procedure. We have presented the results from the latter procedure because these give a slightly better fit.

Table 4 Descriptive statistics and unweighted sample means (18–65 years)

	Ghana	Morocco	Senegal	Egypt
Dependent variable, emigration intention				
No intentions	51.9	71.4	63.6	87.2
Yes, but unsure when	25.9	21.5	30.6	9.8
Yes, after more than 1 year	11.5	4.4	3.3	2.0
Yes, within a year	10.7	2.7	2.5	1.0
Independent variables				
Age (in years)	34.0	41.7	33.9	36.9
Sex (female)	57.9	28.1	58.6	72.9
Marital status				
Single	34.0	17.8	30.8	20.2
Ever married (married, divorced, widowed)	66.0	82.2	69.2	79.8
Education (level achieved)				
No education	14.5	74.8	77.2	55.6
Primary	54.3	14.4	17.3	14.3
Secondary	25.5	6.9	5.0	20.1
Higher	5.7	3.9	0.5	10.0
Income position				
More than sufficient	1.0	5.0	1.1	4.1
Sufficient	31.2	39.3	26.1	64.4
Barely sufficient	36.6	37.4	51.7	24.9
Insufficient	31.2	18.3	21.1	6.6
Work status				
Employer	46.6	27.5	36.1	7.5
Employee	30.3	32.2	22.9	28.1
Unemployed	5.9	2.7	4.1	3.2
Student	8.7	4.1	4.5	4.9
Housework or inactivity	8.5	33.5	32.4	56.3
Household connections				
Household with only non-migrants	62.3	60.4	33.4	36.3
Household with return migrants	7.7	3.7	21.3	27.4
Household with current migrants	28.9	33.1	31.8	27.3
Household with current and return migrants	1.1	2.8	13.5	9.0
Approval of unmarried women migrating				
Approve	66.6	25.8	54.0	5.1
Neither approve nor disapprove	14.9	22.6	1.6	1.3
Disapprove	18.5	51.6	44.4	93.6
Self-efficacy (possibility of direction in life)				
Possible to determine what happens in life	65.6	39.9	20.2	9.8
Not possible, up to fate	34.4	60.1	79.8	90.2
Regional[a]				
1 MD + EM	25.6	11.3	50.5	21.7
2 MD + RM	14.1	52.7	–	23.4
3 LD + EM	27.5	15.7	–	33.3
4 LD + RM	32.8	20.3	49.5	21.6
Expected financial gains from migration				
No	26.4	36.5	20.2	27.2

Table 4 (continued)

	Ghana	Morocco	Senegal	Egypt
Yes, expected gains	73.6	63.5	79.8	72.8
Job search costs				
Easier in the home country	22.9	4.8	7.2	75.8
Equally easy	17.0	21.5	24.4	11.0
Easier in a European country	60.1	74.0	68.4	13.2
Valid N	1,569	583	2,267	2,940

MD More developed, *LD* less developed, *EM* established migration region, *RM* recent migration region
[a] The regions are subdivided along two dimensions: development and migration history

Morocco that men dominated the sample of non-migrants. Moreover, in Muslim countries like Egypt, the labour market status of women is concentrated primarily outside the labour market, namely, inside the home. This status contrasts with that of women in countries like Ghana where women actively participate in gainful employment.

The cultural differences across countries were also reflected in the answers to the question of whether respondents approved of unmarried women migrating abroad for a couple of years. To capture the level of "modernity" in African countries and its effect on migration, respondents were asked "Would you approve or disapprove of a young unmarried woman moving abroad to work there for a couple of years?" and, as Table 4 shows, Ghana was clearly the most tolerant of the four countries because two out of three respondents approved of single women migrating. Egypt was the mirror image of Ghana, with 94% of the respondents disapproving of single women migrating. The other two countries were more divided on this question. It should, however, be pointed out that the sample means for this question were affected by the sex composition (not shown here) of the various samples and might therefore have masked considerable differences. For example, the disapproval rate in Senegal was 44%, but when one considers the differences across the sexes, what emerged was that 53% of the men, and 39% of the women, disapproved of single women migrating. Similar figures can be presented for Morocco, where 58 and 33% of the men and women, respectively, disapproved of single women moving abroad. In Ghana, men and women were more alike in approving of the migration of single women, and the same consensus can be said to exist in Egypt, albeit that the attitude towards single women migrating was completely reversed.

Another cultural question that is often mentioned in intention research is a question that captures the sense of self-efficacy. The question "Do you think that in general it is possible for people to determine what happens in their lives, or do you think it is mostly up to fate?" generated quite marked differences across the four countries: in Ghana, the vast majority felt it was possible to determine what happened, whereas in the other three countries, the vast majority felt it was up to fate, with Egypt being the most traditional society, where 90% thought it was not possible to determine outcomes in life.

4.2.1 Expected signs

In terms of the model coefficient β_i there are a number of predictions that can be made based on migration (intentions) theory. First of all, one would expect age to be of influence because the decision to emigrate involves a flexible approach as well as major investments (some of which are pecuniary, others being less tangible), and this investment has to be recouped over the rest of the life course. One would therefore expect emigration to be most prevalent among the young because they are the ones who have not yet settled down and who have few commitments. Most of them have not yet invested as much in home-country-specific capital as their middle-aged and older compatriots, thereby enabling them to switch countries, or at least consider switching countries, as was the case in our survey.

In terms of ties, such as those associated with marital status or ties with current or return migrants within the household, one would expect to find these having some influence on respondents' intentions. Ties with a spouse or former spouse would indicate that a respondent was less mobile than someone who had never been married. And bearing in mind that traditional values about the role of women in society are still fairly dominant in quite a few African countries, one would expect women to be more reticent about expressing intentions to emigrate because it is the men who often take the lead in migration, to be followed in time by their spouses. Traditional values are also reflected in a person's sense of self-efficacy, and intention theory would predict that those with a higher sense of self-efficacy would, on average, be more set on moving abroad or would have more concrete plans than other potential migrants who lacked this sense.

Social network ties can be an important driving force in triggering emigration. It has been stressed in literature that network ties across countries are extremely important because they lower the costs of adjustment for potential migrants (see e.g. Massey et al. 1998; Curran and Rivero-Fuentes 2003). Emigrants often rely on their relatives when looking for accommodation or work in the destination country, and barriers imposed by a foreign language can, to some extent, be circumvented by using the family network because contacts outside the network are sometimes minimal. To capture some of the network effects that are often stressed in migration decision-making, we included a variable that characterised the households in which respondents lived. We distinguished between four types of households: (1) households consisting only of non-migrants (our benchmark household type), (2) households consisting of non-migrants and one or more return migrants, (3) households consisting of non-migrants and one or more current migrants; and (4) mixed-migrant households in which non-migrants, return and current migrants were present. The reason for including this variable was that the presence of a household member with a current or past migration experience might cause potential migrants in the household to consider emigrating as well or at least affect the firmness of their stated intentions. Return or current migrants in a household tend to convey information about the pros and cons of emigration. A priori, we can therefore expect such information to be more readily available in households with migrants than in those without, but it was not clear how the direction and magnitude of the different network connections would affect the respondents' stated intentions. Return migrants are different from non-migrants because their information is coloured by their experience, and this experience can be either positive or

negative. By the same token, current migrants whose information about finding jobs or accommodation is more up to date can just as easily be positive or negative. The mixed-migrant household can therefore be expected to be in a better position to inform potential migrants because different types of information would be available.

Education can also play a prominent role, as the theory of adverse selection has made abundantly clear. But empirical literature on migration is ambiguous when it comes to the importance and strength of selection effects. Borjas (1987, 1991) observed strong self-selection effects, which suggested that it is primarily the less-skilled migrants who leave their country and emigrate to the US, whereas Chiquiar and Hanson (2002) found ambiguous effects or effects that contradicted Borjas's findings. Although the nature of our data, emigration intentions, is quite different, it would be interesting to see whether the attained level of education had any independent effect on intentions. In other words, is it possible to detect a self-selection effect at the intention-forming stage? Those with a higher level of education are perhaps the ones that are better informed about making a move abroad, and they may also generally be the ones who are sponsored by their family to go abroad because they are believed to have a better chance of making a living, from which those who stay behind can also benefit in the form of financial remittances (see van Dalen et al. 2005). The only comparable research on this topic (based on intention data) is the work by Drinkwater (2002) and Liebig and Sousa-Poza (2004), who draw on the same database. The latter even made the rather bold claim based on their findings that positive self-selection "can be generally expected in international migration."

Income is another ambiguous variable because being well-off can indicate that a respondent can afford the costs associated with migration, but it can just as easily be a reason to stay at home, and the reverse, of course, applies to those who live in poverty; poverty can be an important stimulus to emigrate, but it can also indicate that one is liquidity-constrained, and that financing the migration costs can well prove prohibitive.

Finally, we controlled the regressions for the type of regions in which respondents were living. The survey sample was created along two dimensions, migration history and level of economic development, which means that the data provide us with an opportunity to explore the influence of regional contexts. One of the reasons for using this distinction was to evaluate whether the level of economic development comes into play and whether signs of a "migration culture" are involved when stating migration intentions. One can hypothesise that migration intentions might still be weak in places where migration was still a recent and relatively rare phenomenon, because the idea of migration would not yet have taken a firm hold. In regions with a long and established migration history, going abroad might have become a rite of passage, whereas in regions new to the idea of migration, the intention to move would still be regarded as an adventurous and daring step, and, being such a daring step, one would expect network ties abroad to have a greater impact on emigration intentions in this sort of region than in a region with a more established history of migration. The reference category was a region with a long or established history of emigration and a more developed level of economic development. The other regions were more developed but with a recent migration history, less developed with an established migration history and less developed with a recent migration history.

5 Estimation results

Table 5 presents the estimation results for the non-migrant population of working age (18–65 years) in the four African countries. To fully illustrate the impact of the different expectations, we have presented two models for each country: model 1 simply presents a reduced-form model in which intentions are conditional on a number of individual characteristics, and Model 2 extends the previous model by including variables that approximate the individual-specific optimism vis-à-vis the net benefits associated with emigration. In summing up the driving forces behind the pressure to emigrate, we will discuss the explanatory variables as they appear in Table 5.

5.1 Age

Most emigration studies reveal that emigrants are young, and the results in Table 5 confirmed this finding: the older a respondent was, the less likely he or she was to state an intention to emigrate. What can also be distilled from the data is the fact that the older one gets, the firmer this intention becomes, i.e. the standard deviation declines steadily with increasing age. Both findings are in accordance with theory and related research.

5.2 Sex and marital status

The coefficients relating to sex suggest that there were marked differences between men and women in Morocco, Senegal and Egypt in terms of intentions to emigrate, whereas in Ghana, the differences between men and women were relatively low.

The ties associated with the marital status variable played no role in determining emigration intentions. Marital status was only found to have had a marginal impact in Senegal, where being single triggered respondents to be more determined to emigrate than those with marital ties. But the fact that marital status failed to have any impact is rather puzzling. Part of the solution to this puzzle can be traced back to the different (marital) roles played by men and women in African societies. The differences between men and women when it comes to decision-making is captured in the gender dummy rather than by the marital status variable. In Section 6 we will examine the issue of gender differences in greater detail.

5.3 Education

The impact that education has on emigration intentions is ambiguous if one looks at the estimation results for the four countries. Education clearly had a significant impact on the intention to emigrate in Ghana and Egypt; the effect on the intentions of respondents with a higher level of education was twice as great as on the intentions of those with primary education. In short, judging from these intention data, there would appear to be some positive self-selection effect present even before migration steps are actually taken. But the positive self-selection of potential migrants does not appear to be a universal phenomenon. Negative self-selection

Table 5 Ordered probit analysis of emigration intentions of non-migrants (18–65 years)

	Ghana				Morocco				Senegal				Egypt			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Age	−0.04**	(0.00)	−0.04**	(0.00)	−0.07**	(0.01)	−0.07**	(0.01)	−0.03**	(0.00)	−0.04**	(0.00)	−0.04**	(0.00)	−0.05**	(0.00)
Sex (male = 0)	−0.35***	(0.07)	−0.36***	(0.07)	−1.08**	(0.21)	−1.10**	(0.24)	−0.85**	(0.08)	−0.95**	(0.08)	−1.03**	(0.08)	−1.03**	(0.10)
Marital status (single = 0)																
Ever married	0.09	(0.08)	0.10	(0.08)	−0.01	(0.19)	−0.01	(0.20)	−0.32**	(0.08)	−0.31**	(0.08)	−0.09	(0.08)	−0.14	(0.09)
Education (no education = 0)																
Primary	0.23**	(0.10)	0.25**	(0.11)	−0.41**	(0.17)	−0.45*	(0.17)	0.18**	(0.09)	0.20**	(0.09)	−0.19**	(0.09)	0.17	(0.12)
Secondary	0.24**	(0.12)	0.25***	(0.12)	−0.32	(0.30)	−0.33	(0.27)	0.02	(0.13)	0.01	(0.14)	0.45**	(0.14)	0.45**	(0.11)
Higher	0.33*	(0.18)	0.38***	(0.18)	−0.44	(0.33)	−0.56	(0.38)	−0.81**	(0.41)	−0.97**	(0.44)	0.65**	(0.44)	0.67**	(0.13)
Income position (sufficient = 0)																
More than sufficient	0.64**	(0.31)	0.67**	(0.30)	−0.99*	(0.51)	−1.13**	(0.54)	0.06	(0.32)	0.05	(0.36)	−0.08	(0.36)	−0.07	(0.15)
Barely sufficient	0.05	(0.08)	−0.04	(0.08)	0.24	(0.16)	0.26	(0.17)	−0.17	(0.09)	−0.11	(0.09)	0.01	(0.09)	0.02	(0.09)
Insufficient	0.27**	(0.08)	0.26**	(0.09)	0.57**	(0.22)	0.60**	(0.23)	−0.06	(0.11)	−0.07	(0.11)	0.33**	(0.11)	0.62**	(0.16)
Work status (employee/worker = 0)																
Employer/business owner	−0.19**	(0.08)	−0.20*	(0.08)	−0.31*	(0.16)	−0.40**	(0.16)	0.01	(0.08)	0.04	(0.08)	−0.29*	(0.08)	−0.31**	(0.15)
Unemployed	−0.03	(0.13)	−0.03	(0.13)	0.83**	(0.39)	0.87**	(0.40)	0.36*	(0.12)	−0.39**	(0.12)	0.05	(0.11)	0.06	(0.16)

Table 5 (continued)

	Ghana				Morocco				Senegal				Egypt			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE
Student	−0.15	(0.11)	−0.16*	(0.10)	0.08	(0.31)	0.06	(0.33)	−0.16	(0.14)	−0.19	(0.14)	−0.13	(0.14)	−0.14	(0.12)
Housework or inactive	−0.38**	(0.12)	−0.39	(0.12)	0.04	(0.21)	−0.07	(0.23)	0.00	(0.10)	0.01	(0.10)	−0.51**	(0.10)	−0.58**	(0.10)
Household connections (none = 0)																
With return migrants	−0.04	(0.12)	−0.04	(0.12)	−0.43	(0.31)	−0.36	(0.35)	0.08	(0.10)	−0.08	(0.10)	0.28**	(0.10)	0.31**	(0.10)
With current migrants	0.31**	(0.07)	0.31**	(0.07)	−0.19	(0.19)	−0.11	(0.20)	−0.02	(0.08)	−0.02	(0.09)	0.30**	(0.09)	0.31**	(0.09)
With current and return migrants	0.33	(0.26)	0.39	(0.26)	0.22	(0.26)	0.15	(0.27)	0.13	(0.10)	0.15	(0.11)	0.40**	(0.11)	0.44	(0.14)
Modernity value, women migrating (approve = 0)																
Approve nor disapprove	−0.41**	(0.10)	−0.40**	(0.09)	−0.86**	(0.17)	−0.89**	(0.18)	−0.20	(0.24)	−0.19	(0.24)	−0.47	(0.25)	−0.63**	(0.31)
Disapprove	−0.38**	(0.09)	−0.40**	(0.09)	−0.68**	(0.18)	−0.73**	(0.19)	−0.36**	(0.07)	−0.45**	(0.07)	−0.46**	(0.07)	−0.54**	(0.13)
Self-efficacy (possible to determine = 0)																

0.16**

Table 5 (continued)

	Ghana				Morocco				Senegal				Egypt			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Not possible, up to fate	−0.06	(0.07)	−0.06	(0.07)	−0.13	(0.13)	−0.24*	(0.13)	−0.20**	(0.07)	−0.22**	(0.07)	0.04	(0.12)	0.11	(0.13)
Region dummies (1 MD + EM = 0)																
2 MD + RM	0.30**	(0.11)	0.31**	(0.11)	0.17	(0.21)	0.21	(0.21)	–	–	–	–	0.14	(0.12)	0.16	(0.12)
3 LD + EM	0.25**	(0.09)	0.27**	(0.09)	0.21	(0.24)	0.25	(0.24)	–	–	–	–	0.13	(0.12)	0.19	(0.12)
4 LD + RM	0.36**	(0.08)	−0.40**	(0.08)	0.06	(0.23)	0.14	(0.23)	−0.65**	(0.08)	−0.70	(0.08)	0.17	(0.12)	0.23*	(0.13)
Optimism in gains from migration (no = 0)																
Yes, expected gains	–		0.66**	(0.09)	–		1.12**	(0.22)	–		0.22**	(0.13)	–		1.01**	(0.14)
Optimism in job search (easier at home = 0)																
Equally easy	–		−0.18*	(0.11)	–		−0.42	(0.45)	–		−0.05	(0.13)	–		0.31**	(0.11)
Easier in Europe	–		−0.02	(0.08)	–		−0.02	(0.41)	–		0.49**	(0.12)	–		0.53**	(0.09)
Threshold point 1	−1.22	(0.22)	−1.24	(0.23)	−4.00	(0.54)	−4.41	(0.65)	−2.82	(0.19)	−3.69	(0.19)	−2.00	(0.23)	−2.06	(0.30)
Threshold point 2	−0.40	(0.22)	−0.38	(0.23)	−2.63	(0.51)	−2.93	(0.62)	−1.16	(0.19)	−1.93	(0.19)	−0.86	(0.21)	−0.80	(0.30)
Threshold point 3	0.11	(0.22)	0.14	(0.22)	−2.04	(0.49)	−2.31	(0.60)	−0.69	(0.19)	−1.45	(0.19)	−0.24	(0.22)	−0.15	(0.29)
N	1,569		1,569		562		562		2,267		2,267		2,940		2,940	

Table 5 (continued)

| | Ghana | | | | Morocco | | | | Senegal | | | | Egypt | | | |
| | Model 1 | | Model 2 | | Model 1 | | Model 2 | | Model 1 | | Model 2 | | Model 1 | | Model 2 | |
	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE
Wald χ^2(df)	299.5		384.5		−238.9		226.9		639.9		675.6		515.2		674.0	
Log-likelihood	−1680.6		−1640.5		−32.4		−311.5		−1499.4		−1403.4		−965.9		−896.1	
Pseudo R^2	0.091		0.112		0.282		0.329		0.226		0.275		0.300		0.351	

Standard errors are in parentheses. Estimation results are unweighted
*$P<0.10$; **$P<0.05$

was evident in Morocco, where the intention to move abroad was higher among uneducated respondents than among those with primary education. Senegal was again slightly different because non-migrants with a higher level of education displayed lower intentions than respondents who had had no formal education, but respondents with a primary school diploma were more set on migrating than their uneducated counterparts. The negative selection effect of education in Senegal must not, however, be overstated, because 95% of the respondents only had a primary education or no formal education at all.

5.4 Evaluation of current income position

One would also have expected income evaluation (representing a push factor to emigrate) to be a major driving force in the different African countries. To capture the income situation of individuals, respondents were asked, "Overall, is the financial situation of the household more than sufficient, sufficient, barely sufficient, or insufficient to buy all the basic needs?" And as Table 5 clearly shows, poverty, as measured by an insufficient income position, was indeed a stimulus for emigration in Ghana, Morocco and Egypt; compared to non-migrants who considered their household income sufficient, the intention to emigrate of those with an insufficient income position was significantly more positive. One exception to this rule should be mentioned here: well-off respondents from Ghana were more set on emigrating than respondents in the base category, i.e. households with sufficient income. Poverty did not appear to be a general driving force to emigrate because income level did not seem to play an important role in Senegal.

5.5 Current work status

Work status is a variable that affects migration intentions in a number of ways. Being unemployed is obviously a status that may trigger thoughts of moving abroad, and indeed, the unemployed, despite the fact that the (unweighted) unemployment percentage in the population sample varied between 3 and 8%, were far more set on moving abroad, particularly in Morocco, than the reference category, i.e. employees (or casual workers). Migration clearly offers the unemployed an alternative route to gainful employment. Assessing the pros and cons of migration is a more complex affair for those already in the labour force. As the table clearly shows, employers and owners of businesses were less set on moving abroad than employees, which is understandable, because employers or owners of businesses are fairly tied to their home country, and moving abroad would involve large adjustment costs. Workers (casual labourers, employees or unpaid family workers) are much more flexible in that respect because they do not own physical assets that would have to be sold if they were to emigrate. The fact that students differed little from the reference category (a weak negative effect can only be found in Ghana) is perhaps also surprising because most brain drain studies would lead one to believe that students were absolutely determined to move to the US or Europe.

5.6 Household connections

The estimated coefficients in Table 5 show that the network effect exerted a clear positive influence on the intention to emigrate in Ghana and Egypt. Egyptian respondents belonging to mixed households were slightly more inclined to emigrate than those belonging to a current or a return-migrant household. This is in line with the hypothesis that mixed households convey more information than households with either current or return migrants. The mixed-migrant household was, however, not such a widespread phenomenon in the samples of these countries (1 and 9%, respectively). Current migrant households were the more common type of household.

The fact that network effects were not present in Morocco and Senegal calls into question the general claim in many migration studies that network effects are an important driving force.[10] Because the absence of an effect is quite noteworthy, we would like to put forward a number of reasons why strong network effects failed to show up in our micro-data.

First of all, we were dealing with intentions rather than actual migration behaviour. When stating an intention to emigrate, it is apparently not as important to have connections as it is when actual steps to migrate are undertaken. It should, however, be noted that, among the migrants in Ghana who had plans to migrate, we did see a clear effect of networks increasing the probability of migrating within the year.

A second explanation for the weak network effects may be the way network ties were measured. However, when testing for the presence of network effects, we also used alternative measures such as the presence of a family member (brother, sister, parent or child) abroad, and this variable yielded similarly weak results.

A third explanation for the weak effect of network ties may perhaps be the most plausible one, and this explanation amounts to the existence of a migration culture in certain localities or regions. The effect of a genuine migration culture would be that everyone—young and old, rich and poor, skilled and unskilled—would move if they had the chance to. We know from field studies that this type of migration culture exists, particularly in Morocco and Ghana. In Morocco, policymakers explicitly use emigration policy as a strategy to cope with high unemployment and simultaneously benefit from the benign effects of the remittances migrants send to their family. This sort of general migration culture does not exist in Senegal, but the estimation results in Table 5 suggest that, particularly for Senegal, migration intentions are clearly higher in the established migration regions of Dakar and Pikine than in regions with a short history of migration such as Diourbel and Tourba. This may be another reason why household ties were not that important in Senegal, because ties with the local population in the established migration region may be just as important triggers of intentions to emigrate. The coefficients of the regional dummies in the other countries provided us with no clear picture of the influence of regional migration history or the level of development.

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[10] For a more in-depth study of the case of Morocco, see Van der Erf and Heering (2002).

5.7 Norms and values

When estimating the models in Table 5, the impact of norms and values with regard to emigration was of some importance. Attitudes towards single women migrating were particularly clearly reflected in respondents' intentions in each country. Bearing in mind that Ghana is the most modern of the four African countries (only 18% of the Ghanaian population disapproved of single women migrating), it is perhaps not that surprising that emigration intentions of Ghanaians were also the highest of the four countries.

The sense of self-efficacy was an entirely different story because the effects it produced were not as unambiguous; this variable had an extremely weak impact on triggering migration intentions in Senegal and Morocco, and no impact at all on migration intentions in Ghana and Egypt. The absence of an effect or the presence of weak effects are, however, understandable, because, as we mentioned earlier, the sense of self-efficacy might well refer to other decision processes and not migration decisions in particular. To rephrase the argument, people can have a high sense of self-efficacy but still be determined to stay in their home country because they, for example, believe that they can make things happen in business or in some gainful employment at home.

5.8 Optimism about the net benefits of migration

To capture the influence of expectations, we included in model 2 the answers to the question "Do you think that moving abroad could improve your financial situation?". As explained earlier, these expectations were purged of their inter-dependencies with the other explanatory variables by following a two-step esti-mation procedure. The first-stage regression results have not been presented here to keep the analysis as brief as possible.[11] The following are some of the most salient outcomes of these first-stage regressions, to mention just a few: age and attitudes towards single women migrating impacted negatively on expectations in all countries, i.e. the young had higher expectations than the old, and modern citizens had higher expectations than more traditional citizens. The effect of respondents' regional location on their expectations was only apparent in Ghana and Egypt, where respondents who were located in regions with a recent migration history had higher expectations than those situated in more established regions.

Using these first-stage regressions, we constructed a measure of the non-migrants' optimism by taking the difference between stated and predicted expec-tations. The population of each country ended up being skewed towards optimistic expectations, i.e. most respondents' expectations exceeded their predicted value. And as can be deduced from Table 5, the optimism about the financial gains associated with a move abroad was indeed a major driving force behind the intention to emigrate; the coefficients for each country were large and statistically significant. This effect was clearly important because the vast majority of the re-

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[11] Interested readers can obtain first-stage regression results upon request from the authors.

spondents (between 64 and 80%, see Table 4) expected that moving abroad would improve their financial situation.[12]

Apart from the optimism associated with the gains, there were also the costs associated with moving abroad, one being the cost of finding employment. The survey asked the following question, "Where do you think it is easier to find a job: in this country or in a European country?" Respondents could choose between the options (1) easier in the home country, (2) equally easy or (3) easier in a European country. The same two-step estimation procedure was applied to the expected financial gains question, and the explanatory variable should again be interpreted in terms of optimism (or pessimism). On the whole, most non-migrants in Ghana, Morocco and Senegal expected that finding a job in Europe would be easier than in their home country. Non-migrants in Egypt were the exception to this rule, a divergence that would seem to be directly related to the fact that the preferred country of destination was not Europe. Most potential emigrants in Egypt were not focused on Europe at all but on the Middle East, and this was true to a lesser extent for Ghana, where the US was the most popular country of destination. However, although the question may not have been relevant to all respondents, the stance that was reflected in respondents' expectations about finding a job in Europe did reveal something about their outlook. This optimistic stance was also reflected in the estimates in Table 5: respondents in Egypt who thought finding a job would be easier in Europe than in Egypt were particularly motivated to emigrate.

6 Gender differences in migration intentions

Estimating relationships, like those shown in Table 5, can mask differences if groups differ considerably in their intentions. An important group distinction, certainly in the context of traditional African countries, is the one delineated by sex. One of the most striking and robust aspects of our migration research was that African men and women had different emigration intentions, and this can easily be deduced from the estimation results contained in Table 5, where the dummy variable "sex" had large coefficients in traditional countries such as Morocco and Egypt. The cultural context of different countries clearly affected migration decisions, and this is relevant in Islamic countries, where it is generally less acceptable for single women to emigrate independently, or for married women to migrate alone, leaving their husband and children behind. In these countries, as mentioned earlier, the independent migration of women, i.e. not within the context of the family, is uncommon and generally frowned upon. The more generally accepted alternative of family reunification migration is rarely an option for Egyptian women whose husbands generally work in the Gulf region. Family reunification is, in principle, open to Senegalese women with husbands in Europe, although usually, only for one of the wives in the case of polygamous marriages; for the wives of recent, often undocumented migrants, migration is not a very viable option either.

To take account of gender differences in emigration, we re-estimated model 2 of Table 5 for both men and women, and the results are presented in Table 6. When re-

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[12] We also checked for correlation between the intention to emigrate and the financial expectations associated with emigration, and this correlation turned out to be quite low.

Table 6 Ordered probit analysis of emigration intentions of non-migrants (18–65 years): men vs women

| | Ghana | | | | Morocco | | | | Senegal | | | | Egypt | | | |
| | Men | | Women | | Men | | Women | | Men | | Women | | Men | | Women | |
	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE
Age	-0.04**	(0.01)	-0.04**	(0.00)	-0.08**	(0.01)	-0.06**	(0.02)	-0.05**	(0.01)	-0.03**	(0.00)	-0.06**	(0.01)	-0.03**	(0.01)
Marital status (single = 0)																
Ever Married	0.11	(0.13)	0.10	(0.11)	0.11	(0.23)	0.37	(0.53)	-0.15	(0.12)	-0.41**	(0.12)	-0.13	(0.16)	0.01	(0.14)
Education (no education = 0)																
Primary	0.02	(0.26)	0.30**	(0.12)	-0.68**	(0.20)	0.55	(0.48)	0.25**	(0.11)	0.20	(0.14)	0.03	(0.17)	0.35**	(0.17)
Secondary and higher	0.16	(0.26)	0.34**	(0.14)	-0.38	(0.26)	0.21	(0.86)	0.06	(0.15)	-0.20	(0.28)	0.44**	(0.14)	0.59**	(0.15)
Income position (sufficient or more = 0)																
Barely sufficient	-0.16	(0.12)	0.13	(0.11)	0.13	(0.19)	0.87**	(0.29)	-0.25**	(0.11)	0.03	(0.12)	0.14	(0.13)	-0.13	(0.14)
Insufficient	0.04	(0.12)	0.40**	(0.11)	0.54**	(0.23)	1.77**	(0.83)	-0.17	(0.14)	-0.05	(0.15)	0.71**	(0.24)	-0.05	(0.24)
Work status (employee = 0)																
Employer/business owner	-0.20*	(0.12)	-0.20*	(0.11)	-0.48**	(0.17)	1.21*	(0.71)	0.13	(0.10)	-0.09	(0.15)	-0.36*	(0.17)	-0.46	(0.47)
Unemployed	-0.00	(0.19)	-0.08	(0.18)	0.86**	(0.44)	–a	(–)	0.37**	(0.15)	0.55**	(0.19)	0.38	(0.25)	-0.20	(0.25)
Student	-0.28**	(0.13)	-0.01	(0.16)	0.05	(0.40)	1.03	(0.66)	-0.18	(0.18)	-0.08	(0.23)	-0.34**	(0.14)	0.07	(0.22)
Housework or inactive	-0.47**	(0.23)	-0.38**	(0.15)	-0.03	(0.24)	0.51	(0.52)	-0.19	(0.20)	0.09	(0.14)	-0.38	(0.24)	-0.59**	(0.12)
Household connections (none = 0)																
With return migrants	-0.23	(0.18)	0.05	(0.15)	0.01	(0.46)	-0.57	(0.58)	0.08	(0.12)	0.09	(0.13)	0.32**	(0.15)	0.32**	0.15

Table 6 (continued)

	Ghana				Morocco				Senegal				Egypt			
	Men		Women		Men		Women		Men		Women		Men		Women	
	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE	Coeficient	SE
With current migrants	0.24**	(0.11)	0.38**	(0.10)	−0.18	(0.22)	0.10	(0.49)	0.01	(0.11)	0.01	(0.13)	0.31**	(0.12)	0.39**	(0.15)
With current and return migrants	0.45*	(0.27)	0.32	(0.45)	0.02	(0.29)	0.28	(0.68)	−0.08	(0.15)	0.33**	(0.14)	0.47**	(0.22)	0.47**	(0.20)
Modernity value, women migrating (approve = 0)																
Neutral or disapprove	−0.30**	(0.10)	−0.49**	(0.10)	−0.63**	(0.19)	−1.30**	(0.33)	−0.35**	(0.09)	−0.49**	(0.10)	0.26	(0.21)	−0.73**	(0.14)
Self-efficacy (possible to determine = 0)																
Not possible, up to fate	0.05	(0.10)	−0.13	(0.09)	−0.18	(0.15)	−0.28	(0.34)	−0.21**	(0.09)	−0.14	(0.11)	0.20	(0.18)	−0.11	(0.16)
Region dummies (1 MD + EM = 0)																
2 MD + RM	0.40**	(0.16)	0.35**	(0.17)	0.15	(0.22)	−0.20	(0.73)	–		–		0.22	(0.17)	0.09	(0.16)
3 LD + EM	0.12	(0.13)	0.42*	(0.13)	0.06	(0.28)	1.13	(0.79)	–		–		0.36**	(0.17)	0.02	(0.16)
4 LD + RM	0.39**	(0.12)	−0.46**	(0.12)	0.05	(0.27)	−0.07	(0.67)	−0.49**	(0.10)	−0.92*	(0.11)	0.45**	(0.17)	−0.08	(0.20)
Optimism in gains from migration (no = 0)																
Yes, expected gains	0.64**	(0.14)	0.66**	(0.11)	1.20**	(0.25)	0.85**	(0.39)	0.99**	(0.17)	1.20**	(0.15)	1.37**	(0.18)	0.60**	(0.16)
Optimism in job search (easier or equally easy at home = 0)																

Table 6 (continued)

	Ghana				Morocco				Senegal				Egypt			
	Men		Women		Men		Women		Men		Women		Men		Women	
	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE	Coefficient	SE
Easier in Europe	0.17*	(0.10)	−0.02	(0.09)	0.38	(0.26)	0.16	(0.45)	0.58**	(0.10)	0.44**	(0.09)	0.55**	(0.1)	0.41**	(0.13)
Threshold point 1	−1.41	(0.38)	−0.48	(0.28)	−3.17	(0.48)	−0.43	(1.17)	−2.64	(0.23)	−1.08	(0.26)	−0.29	(0.45)	−0.09	(0.43)
Threshold point 2	−0.61	(0.38)	0.43	(0.28)	−1.67	(0.46)	1.07	(1.15)	−0.90	(0.22)	0.75	(0.26)	1.01	(0.45)	1.27	(0.45)
Threshold point 3	0.06	(0.38)	0.81	(0.28)	−1.01	(0.45)	1.51	(1.10)	−0.36	(0.23)	1.12	(0.28)	1.81	(0.45)	1.47	(0.46)
N	660		909		409		162		949		1,356		798		2,142	
Wald χ^2 (df)	143.6		216.0		183.9		92.0		−332.5		−365.4		−356.0		−198.8	
Log-likelihood	−760.5		−866.9		−238.4		−61.00		−752.2		−650.5		−496.9		−372.7	
Pseudo R^2	0.101		0.110		0.332		0.355		0.231		0.259		0.298		0.238	

Standard errors are in parentheses. Estimation results are unweighted

*$P<0.10$; **$P<0.05$

[a] Variable dropped due to collinearity

estimating the model for the different samples of men and women, a number of things became apparent.[13] First of all, men seemed to be influenced by high financial expectations and low job-search costs when stating their intentions.

Secondly, the intentions of women were less influenced by these financial expectations of emigration than the intentions of men were. This tallies with what Vogler and Rotte (2000) found when studying panel data on immigration flows from 86 African and Asian countries: men react more strongly to economic factors than women do. The really important factors affecting women's intentions are networks, education, household income position and the adoption of values that are in keeping with the Western world (approximated by the attitude towards unmarried women moving abroad). The effect that self-efficacy can have on intentions is unclear because it only mattered to some extent to men in Senegal. The effect was also quite negligible, which suggests that potential emigrants did not seem to possess the typical sort of psychological character trait that would make them successful in their chosen destination countries.

Thirdly, marital status did not have an effect on the intentions of either men or women. As we mentioned earlier in Section 5, one would expect marital status a priori to be of some significance because those who were single would have no ties with a (former) spouse or children and would have the advantage of being flexible. When answering questions about their intentions, they may therefore be more inclined to regard emigration as a viable option. The estimation results defied this logic. However, the absence of any impact on men is compatible with day-to-day experience and tradition in Muslim African societies, where men take the lead in decision-making. Being married should therefore not be a factor of importance to men when considering whether to move or stay. The absence of an effect was more puzzling in the case of women because their intentions to move abroad would depend on the choice their husbands made. One reason why marital status failed to exert an independent effect on the migration decisions of women (except in the case of Senegalese women) might be traced to the fact that emigration is not a free choice for women when they are single, because society does not condone it, or when they are married, because they either follow their husbands abroad, or they stay behind and live on the remittances that are sent back home. The fact that marital status did not have any independent effect on intentions may, to some extent, also be explained by the fact that some background variables such as age already covered the influence of marital status.

Finally, the effect that education had on emigration clearly differed between men and women, and therefore sheds some interesting light on the relevance of self-selection theories, because these theories tend to not pay attention to gender roles, roles which evidently are important for understanding migration flows and structures, as Table 6 shows. The positive self-selection effect for Ghana in Table 5 was clearly driven by the fact that this selection effect only applied to Ghanaian women, whereas education did not exert a noticeable force on the intentions of men. The same can be said, to a lesser extent, of Egypt, although positive self-selection was present among both men and women. The reverse was true for Morocco, where negative self-selection applied only to the intentions of men, and

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[13] When re-estimating the models, we had to change a number of dummy variables to avoid the problems associated with having samples that are too small.

education played no role at all for women. In Senegal only a weak case of positive self-selection was detectable for the men.

7 Discussion and conclusion

So who intends to leave Africa? And what forces drive them out of Africa? Is it the lure of the rich West, or is it the poverty and the loss of future of Africa that drives people across the border? These questions may sound simple, but they produced different answers, and unfortunately, there is only scant micro-evidence available on the importance of the various factors that are at play in Africa. But the importance of gaining a quantitative insight into this question is increasing because Africa is one of the continents that will have an impact on global migration flows over the next 50 years (see, e.g. United Nations 2002; Hatton and Williamson 2003b).

Using data from migration surveys carried out in four African countries (Ghana, Senegal, Egypt and Morocco) between 1997 and 1998, we showed how high the emigration intentions were and what drove these intentions. The survey data clearly showed that emigration pressure was high in some countries (Ghana and Senegal), whereas in countries like Egypt, the pressure (i.e. emigration intentions) did not seem to take on dramatic proportions. What seemed to emerge clearly from the countries considered was that emigration out of Africa was the dominant stated preference, and that the typical potential migrant was a young male individual with modern values; but if we had to sum up what dominated the pressure to emigrate out of Africa, it would be just two words: great expectations. The intention to emigrate, in all four African countries, was clearly driven by economic motives and expectations, particularly among young men. The expectations of financial gains associated with migration, combined with an optimistic view of finding a job in the destination country, influenced the intention to emigrate in all four countries quite heavily. One finding perhaps worthy of note was that the men attached more importance to the expected financial gains of emigration than the women. Although this is completely in line with what one would expect, the force that expectations exert on emigration intentions is quite strong and, as far as we know, this is a novel element for empirical international migration studies. This particular insight supports the theoretical analysis of O'Connell (1997) on migration decision-making under conditions of uncertainty.

But apart from these general observations, it is hard to distil any more stylised facts about migration. "Who leaves?" may be a simple question, but in practice, it is one that is extremely difficult to answer because each country is characterised by specific elements that seem to trigger emigration intentions. The roles played by education, income position and labour force status in the intention-forming process are not as robust or as overwhelming as the previously mentioned expectations and the demographics of age and sex. Poverty and unemployment are driving forces in most countries, but none of these findings should be regarded as ironclad rules. Each country told a different story. For instance, poverty (as measured by an insufficient income position) did not play a role of any importance in Senegal, and unemployment was not a notable driving force in Egypt and Ghana. Self-efficacy played no distinguishable role in Ghana, Morocco and Egypt and, last but not least, the impact of education on migration intentions was completely ambiguous. A

close scrutiny of the impact of education on both men and women revealed that strong positive self-selection effects were only evident among Ghanaian and Egyptian women. The evidence for men was mixed: positive self-selection only applied to Egyptian and (to some extent) Senegalese men, negative self-selection was even evident among Moroccan men, and the educational level of Ghanaian men did not affect their intentions.

One final finding that needs to be included in this conclusion is that social network effects made their mark in terms of increasing the intention to emigrate, but not as much as one would have expected. In Ghana and Egypt, the effect of having a household member who had been an international migrant or who was still a migrant was clearly important and exerted a strong force on the intentions of potential migrants. But given the fact that social network effects on intentions were virtually non-existent in Senegal and Morocco, this casts some doubt on the general importance of social network effects to migration intentions. This finding contrasts sharply with the actual practice of migration, where networks have proven to be a structural driving force. One reason why this may be the case is either because forming intentions is entirely different from realising intentions and actually emigrating, or because emigration in countries like Morocco and Ghana is heavily influenced by a nationwide migration culture. The situation in Senegal may perhaps be the result of region-specific migration culture.

So what do these findings imply for the future of these countries and the countries of destination? In our Introduction we cited the opinions of some well-informed economists on the future of Africa, and they were not particularly optimistic. The migration pressure is real and will be hard to redress. Hatton and Williamson (2002) concluded their review of migration forces in the world today by making the following (under)statement: "if OECD countries think they have an immigration problem now, they are going to find the future even more challenging." The ultimate question, of course, is whether the prime forces that trigger emigration (and the underlying intentions) will reduce this pressure in the near future. Immigration countries, both the traditional immigration countries like the US and Australia and also countries in Europe, are grappling with the consequences of immigration, and a slower pace of immigration would seem more desirable because it would enable the institutions and citizens of most of these countries to make adjustments to accommodate the inflow of immigrants. To the extent that one can rely on intentions as predictors of future behaviour, the one thing the estimation results make clear is that the emigration pressure will not subside for a considerable time. First of all, it will take time for the economic prospects in these African countries to improve, and once they have improved, closing the gap between African and Western standards of living will be difficult, if not impossible. And secondly, we know from actual migration experience that transnational networks have an important effect on emigration decisions. In short, these are the forces (great expectations about economic gains, poverty, a relatively young age structure and social networks) that will stimulate emigration out of Africa for years, if not decades, to come, and the most important countervailing force (rapid catching-up processes in the African economies) lacks credibility and will probably not have any significant impact on the expectations of populations for years to come.

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