Some Determinants of Sustainable Economic Reintegration

EU-IOM Joint Initiative for Migrant Protection and Reintegration in the Sahel and Lake Chad Region

Introduction

Background. A short paragraph on the program.

Aim. What we assess, with which data, using which method.

Questions that should be answered.

Overall methodology (regression)

Reintegration Economic Survey (RES)

Introduction. What the RES is.

Sample size and main statistics. Methodology specifics.

Model 1: Determinants of Business Success

Model 2: Determinants of Business Profitability

Model 3: Effect of Training on Business Success

Model 4: Determinants of Future Intentions to Migrate

Model 5: Determinants of Employee Number

Reintegration Sustainability Survey (RSS)

Introduction. What the RSS is.

Sample size and main statistics. Including plot on correlations between RSS scores.

Model 6: Determinants of Sustainable Reintegration (Composite Score)

Model 7: Determinants of Sustainable Reintegration (Economic Score)

Summary of Results

A short discussion of the results.

With a table showing which predictors are significant across all models, and significance levels.

Lessons Learned and Recommendations

Recommendations concerning the results. That is, which variables are key, etc.

Recommendations concerning data issues and data wrangling.

List of Figures and Tables

Appendices

Summary of Data Sets Used

Data Analysis Plan

RES Descriptive Plots

RSS Descriptive Plots

Correlations Between RSS Scores (Table)

Interaction of Country and Business Type for Model 1

Model 5 with Time to receive assistance added

Model 5 with Assistance count added

Predicting Social score and Psychosocial score

Other Submitted Documents

These documents are submitted separately.

A folder containing all clean data sets used for analysis, with notes on how these were built.

A folder with all R scripts, which allows to reproduce all data processes.

A log of anomalies. Might be included in R scripts.

A log of changes to the data. Might be included in R scripts.

Introduction

The Joint Initiative and assistance to voluntary return and reintegration

The EU-IOM Joint Initiative for Migrant Protection and Reintegration was launched in April 2017 and implemented in 13 countries of the Sahel and Lake Chad Region.¹ A key element of the Joint Initiative is assistance to voluntary return and reintegration. Migrants who voluntarily decided to return received economic, social, and psychosocial support, such as job placement, training, housing, education, childcare, special security measures, and so on².

The overarching goal of the Joint Initiative is the successful reintegration of migrants in a dignified and sustainable manner³. It is therefore crucial to assess whether the reintegration measures offered to the migrants are efficient and positively contribute to this goal.

Assessing measures of economic reintegration

The current study assesses the effectiveness of some of these measures, with a focus on economic reintegration. For example, some respondents received business management training. Does this training positively influence reintegration, such that respondents who received it tend to have a higher business success than those who did not receive it? Furthermore, if training has a positive impact, is this impact the same for all business types or activities?

While exploring such questions, this study also considers factors that are not related to the assistance received by the migrants, but that might impact reintegration, such as age, gender, disability, where the respondents are based, where they are returning from, and so on. For example, we might find that training is most efficient for respondents engaged in retail, except in a given country, and only if the respondent has no disability.

Exploring the determinants of sustainable reintegration using regression analysis

To explore these complex relationships, and ultimately identify the determinants of sustainable economic reintegration, regression analysis was used. Regression analysis allows to use multiple factors or variables to explain an outcome. Examples of outcomes are whether the business of the respondents is profitable, or how high the Economic score of the respondents is. In short, regression analysis tells us which factors have an impact on reintegration, and whether this impact is positive or negative.

While doing so, regression also allows us to *isolate* the effect of each factor. For example, we might find that businesses launched by men are more profitable than businesses launched by women. Would it be correct to conclude that gender is a determinant of successful economic reintegration, and

¹ Burkina Faso, Cameroon, Chad, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea Bissau, Mali, Mauritania, Niger, Nigeria, and Senegal.

² The full catalog of measures is available in the file "MiMOSA activities and dimension of reintegration assistance.xlsx".

³ EUTF-IOM Initiative for Migrant Protection and Reintegration: Standard Operating Procedures for Assisted Voluntary Return and Reintegration, p. 6.

that helping men is therefore more efficient than helping women? No, because the apparent success of men might be explained by other factors. For example, men might be engaged in activities that are, in themselves, more profitable. In other words, it is the type of activity, not the gender, which would explain the apparent higher degree of success amongst men.

This is why regression analysis is useful. Regression analysis will evaluate the impact of each factor while holding the impact of all other factors constant. In the example above, it will evaluate the impact of gender while controlling for the impact of business activity. Regression analysis might then find than once we take into account business activity, there are no differences between men and women in terms of business profitability. And this would have obvious implications for programming. In this case, business activities that result in a high profitability should be encouraged, whereas gender should be considered irrelevant to business success.

Study questions

Six questions were investigated in this study. Four concerned economic reintegration, one concerned overall reintegration, and the last one concerned the respondents' future intentions to migrate. Table X summarises the questions, how they were investigated, and their data source.

Study Outline

To be written last.

Table X: Determinants of Economic Reintegration Considered in this Study

	Using these variables	To explain this variable	Data
1. What makes a successful	Age, Business members, Business	Is your business open and	RES
returnee business?	type, Corona impact on business,	well?	Reintegration Economic Survey
	Country, Country of return, Disability,		1,917 respondents
2. What makes a profitable	Employee Number, First Choice,	Does your business cover	Models 1-2, 5
returnee business?	Gender, Interview Type, Migration	your needs and those of your	
	Duration, Business management	family?	
	training, Received support as		
3. Does training contribute to	Same as 1. and 2., with the following	Is your business open and	Training
returnee business success?	variables added:	well?	Reintegration Economic Survey
	Training type, Training duration,		and Mimosa
	assistance duration, Return to		1,852 respondents
	reintegration		Model 3
4. What makes a successful	Age, Financial services, Gender,	Economic reintegration score	RSS
economic reintegration?	Material assistance, MB assistance		Reintegration Sustainability
	duration, MB support duration,		Survey <u>and</u> Mimosa
	Medical support, MB form of		1,385 Respondents
5. What makes a successful	assistance, Migration duration, Origin	Composite reintegration	Models 6-7
reintegration overall?	country, Psycho-social support,	score	
	Return country, Social support,		
	Training, Training duration		
6. What makes returnees want	Same as 1. and 2.	Do you plan to migrate	RES
to migrate again?		again?	Reintegration Economic Survey
			1,917 respondents
			Model 4

Data used in analyses

The following data sources were used to investigate the study questions: the Reintegration Economic Survey (RES), the Reintegration Sustainability Survey (RSS), and IOM's Mimosa. They were either used on their own, or in combination with each other.

In fact, three data sets were assembled from these sources. The first data set, which we will call **RES**, has 1,917 respondents, and includes data from the RES questionnaire only. It was used to explore Question 1, Question 2, and Question 6. The second data set, **RSS**, has 1,385 respondents, and includes data from both the RSS questionnaire and Mimosa. It was used to explore Question 4 and Question 5. The third data set, **Training**, has 1,852 respondents, and includes data from both the RES questionnaire and Mimosa. Appendix X provides more information on how the data sets were assembled.

There is some overlap between these three datasets, with some respondents appearing in only one dataset, or in two of them, or in all of them. For example, 1,687 respondents appear in both RES and Training, whereas 77 respondents appear in all datasets. Figure X shows the intersection of respondents across datasets.

RES 1,917 77 RSS 1,385 77 74 Training 1,852

Figure X: Intersection of Respondents Across Data Sets

We now provide more details on the three data sets and their sample characteristics.

RES

The RES data set has 23 variables and includes 1,917 interviews conducted between September 2020 and April 2023. Most of these interviews were conducted in Senegal (28% of all respondents), Guinea (18%), Ivory Coast (14%), and Burkina Faso (14%), with most respondents being returnees from Libya (27%), Algeria (26%), Niger (20%), and Morocco (17%).

Most of the respondents were men (90%), and most respondents were aged 14-35 years old (82%). The most frequently cited economic activities of the respondents were trade⁴ (41%), animal farming⁵ (17%), transport (14%), and agriculture/aviculture (10%). More than three-quarters of respondents did not have employees (77%). Out of those who had employees, 61% had a single employee, and 39% had more than one employee.

The frequencies of all variables of the RES data set are in Appendix X.

RSS

The RES data set has 21 variables and includes 1,385 interviews conducted between October 2022 and January 2023. It therefore covers a shorter time range than RSS and RES.

Training

The Training data set has 28 variables and includes 1,852 interviews conducted between October 2022 and January 2023 (same time range as RES).

⁴ In French, 'commerce'.

⁵ In French, 'élevage'.

Appendix X: Summary of Data Sets Used in Analyses

	File name	Based on	Dimensions	Notes
RSS	rss.csv	Reintegration Cases M&E RSS June 2023 (liste complète).xlsx [Mimosa] and RSS data cleaned to use for analysis V3 doublons corriges.xlsx [Kobo]	1,385 x 217	The RSS survey data, a merger done by the consultant. Contains all data, including scores, weights, etc. All duration variables should be used with caution due to some inconsistencies in the raw data. Script: preparation_rss.R
	rss_slim.csv		1,385 x 35	Same as previous, with only the composite scores and only our variables of interest All duration variables should be used with caution due to some inconsistencies in the raw data. Script: preparation_rss.R
	rss_slim_recoded.csv		1,385 x 21	Same as previous, except that data were processed for regression analysis (i.e., some categories were recoded to meet sample size criteria, outliers were replaced or removed, etc.), and that variables that could not be recoded were excluded. All duration variables should be used with caution due to some inconsistencies in the raw data. Script: preparation_rss.R
RES	res.csv	RE_Economic_Survey_clean for data analysis_final.xlsx [kobo] ⁶	2,026 x 23	The RES data. Script: preparation_res.R
	res_slim.csv		1,917 x 23	Same as previous, except that data were processed for regression analysis (i.e., some categories were recoded to meet sample size

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⁶ This file was received 23 June 2023. It is exactly the same file as RE_Economic_Survey_clean for data analysis.xlsx received on 21 June 2023, except that the suffix "_final" was added.

				criteria, outliers were replaced or removed, etc.), and that missing data that could not be recoded were excluded. Script: preparation_res.R
Training	res_training.csv	MIMOSA Reint Cases M&E-eco v2 identification.xlsx [Mimosa] and RE_Economic_Survey_clean for data analysis.xlsx [Kobo	1,968 x 30	The RES survey data plus some Training variables from Mimosa, a merger done by the consultant. Some variables and observations of this dataset are likely corrupt, due to many challenges in merging the data and identifying the right IDs. Should be used with a lot of caution. Note merger was done using two IDs (first trying to match caseno, then MemberNo, from Mimosa, with `Identifiant MiMOSA du cas bis`, from Kobo), and that duplicates were removed without further inspection. Script: preparation_res_training.R
	res_training_slim.csv		1,852 x 28	Same as previous, except that data were processed for regression analysis (i.e., some categories were recoded to meet sample size criteria, outliers were replaced or removed, etc.), and that variables that could not be recoded were excluded. Some variables and observations of this dataset are likely corrupt, due to many challenges in merging the data and identifying the right IDs. Should be used with a lot of caution. Script: preparation_res_training.R

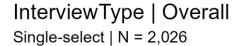
Note. For RES training, the following 3 files provide more details on errors and inconsistencies:

- res_training_to_resolve.csv shows inconsistencies and irreconcilable duplicates between Mimosa and Kobo data
- res_training_to_resolve_cases.csv lists 75 respondents where answers might possibly be corrupt
- res_training_to_resolve_gender.csv shows some (but not necessarily all) cases where the gender of participants is different in Mimosa and Kobo, despite having the same ID

Appendix X: Frequencies of RES Variables

Note. Each variable has two graphs. The first graph shows frequencies from the raw data, whereas the second graph shows frequencies after recoding for regression analysis. The number of respondents is provided in the subtitle of each graph. Typically, the second graph has fewer answer options, and a smaller number of observations. That is because some answer options were grouped and and some missing answers or outliers were removed for regression analysis.

Variables are presented in the order in which they appear in the questionnaire, and only variables used in analyses are included. Dependent variables are presented in the main text.





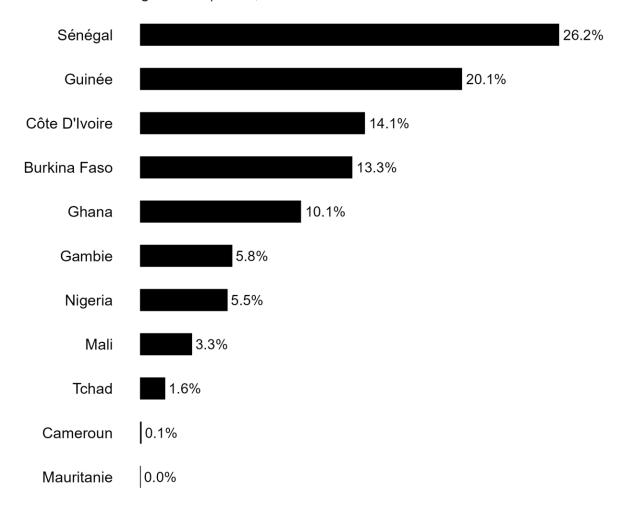
For regression analysis, recoded as:

InterviewType | Overall



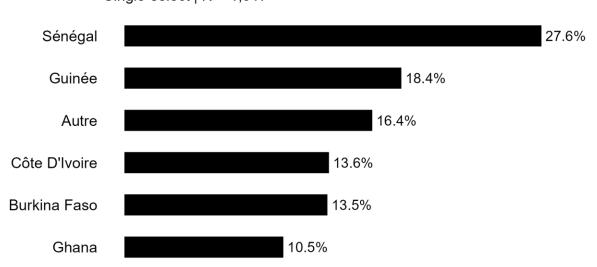
Country | Overall

Single-select | N = 2,026



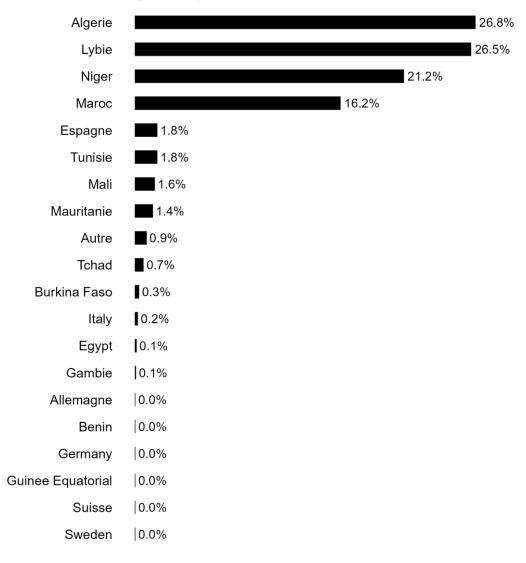
For regression analysis, recoded as:

Country | Overall



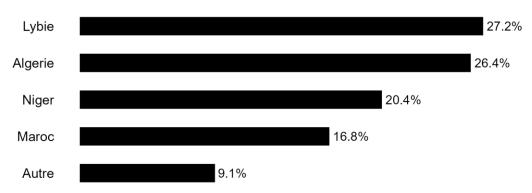
CountryOfReturn | Overall

Single-select | N = 2,025



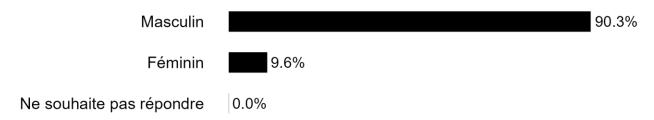
For regression analysis, recoded as:

CountryOfReturn | Overall



Gender | Overall

Single-select | N = 2,026



For regression analysis, recoded as:

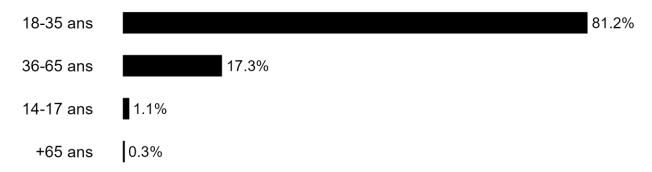
Gender | Overall

Single-select | N = 1,917



AgeGroup | Overall

Single-select | N = 2,026



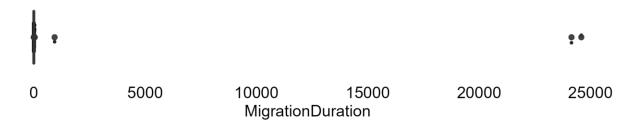
For regression analysis, recoded as:

AgeGroup | Overall



Migration Duration | Overall

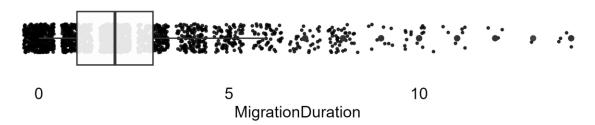
Single-select | N = 1,912



For regression analysis, recoded as:

Migration Duration | Overall

Single-select | N = 1,917



Disabled | Overall

Single-select | N = 2,026



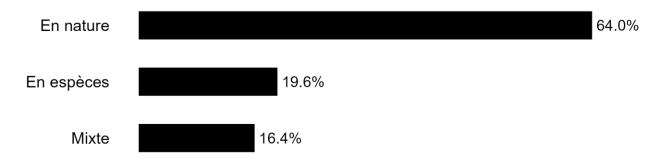
For regression analysis, recoded as:

Disabled | Overall



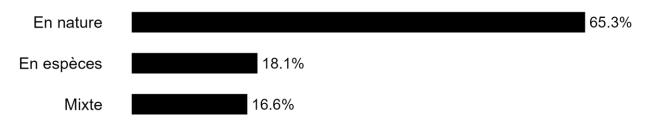
ReceivedSupportAs | Overall

Single-select | N = 2,016



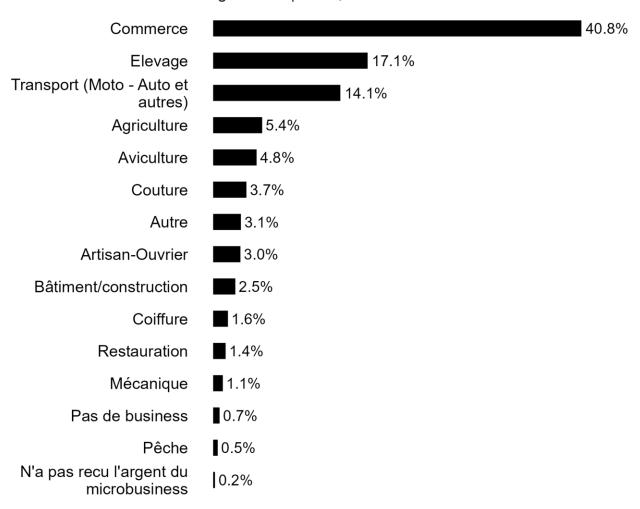
For regression analysis, recoded as:

ReceivedSupportAs | Overall



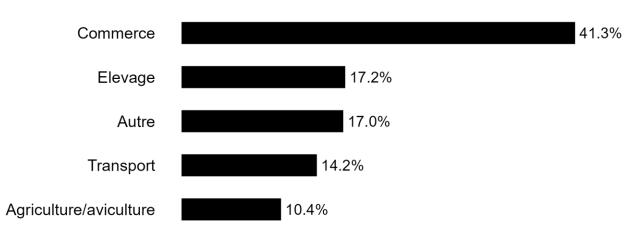
BusinessType | Overall

Single-select | N = 1,952



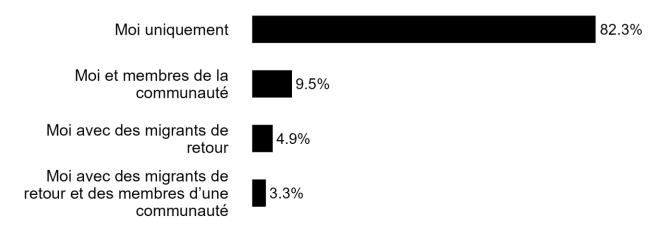
For regression analysis, recoded as:

BusinessType | Overall



BusinessMembers | Overall

Single-select | N = 1,952



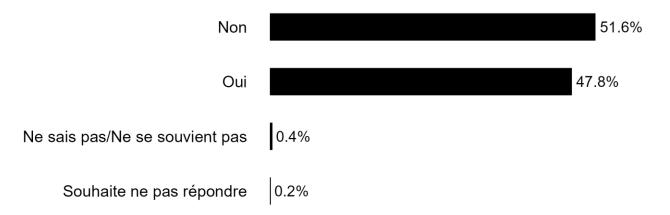
For regression analysis, recoded as:

BusinessMembers | Overall



ReceivedIOMBusinessAdvice | Overall

Single-select | N = 1,952



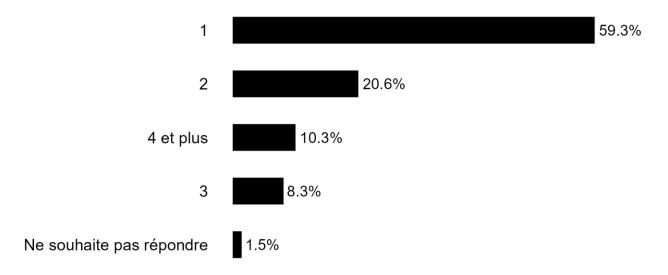
For regression analysis, recoded as:

ReceivedIOMBusinessAdvice | Overall



EmployeeNumber | Overall

Single-select | N = 408



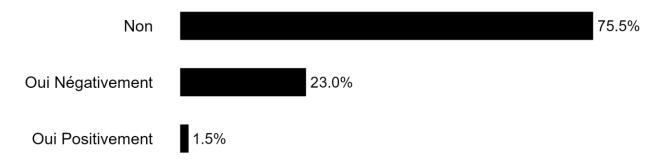
For regression analysis, recoded as:

EmployeeNumber | Overall



CoronalmpactOnBusiness | Overall

Single-select | N = 1,952



For regression analysis, recoded as:

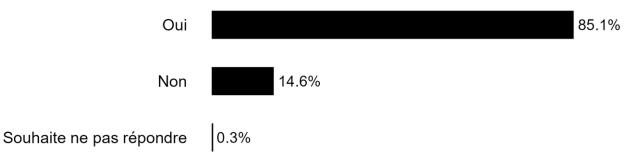
CoronalmpactOnBusiness | Overall

Single-select | N = 1,917



FirstChoice | Overall

Single-select | N = 2,016



For regression analysis, recoded as:

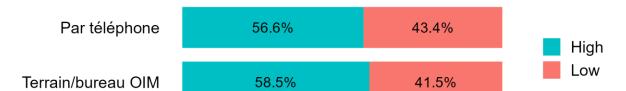
FirstChoice | Overall



Appendix X: Frequencies of Business Success (RES) by Each Independent Variable

Note. Variables are presented in the order in which they appear in the questionnaire, and only variables used in analyses are included (i.e., variables recoded for regression analysis).

Business Success | by InterviewType Single-select | N = 1,917

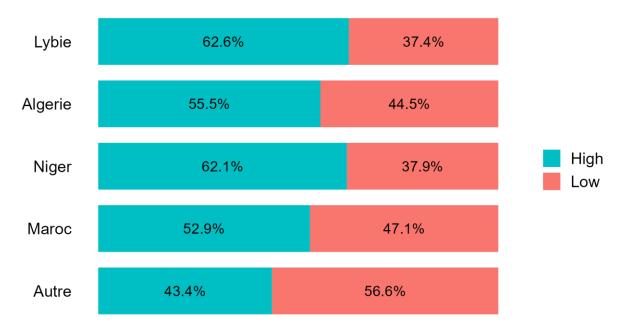


Business Success | by Country



Business Success | by CountryOfReturn

Single-select | N = 1,917



Business Success | by Gender

Single-select | N = 1,917

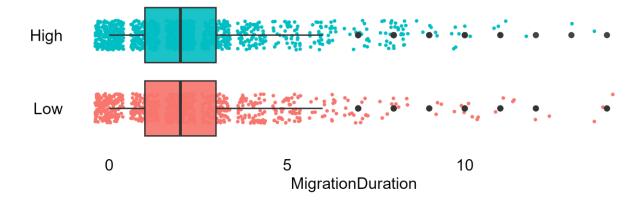


Business Success | by AgeGroup



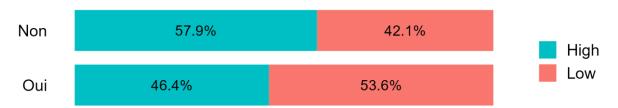
Business Success | by Migration Duration

Single-select | N = 1,917

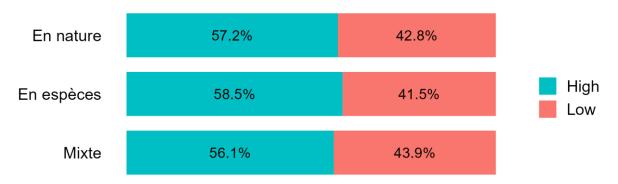


Business Success | by Disabled

Single-select | N = 1,917

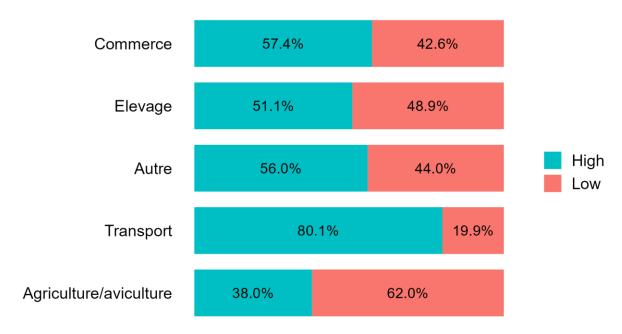


Business Success | by ReceivedSupportAs



Business Success | by BusinessType

Single-select | N = 1,917



Business Success | by BusinessMembers

Single-select | N = 1,917

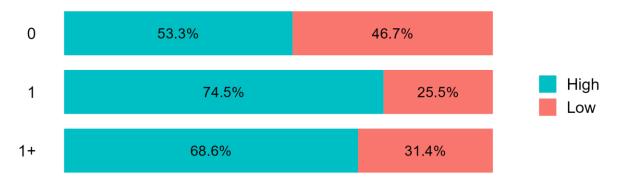


Business Success | by ReceivedIOMBusinessAdvice



Business Success | by EmployeeNumber

Single-select | N = 1,917

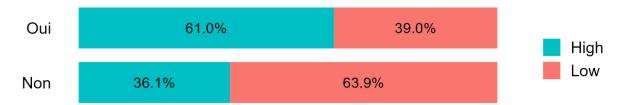


Business Success | by CoronalmpactOnBusiness

Single-select | N = 1,917



Business Success | by FirstChoice

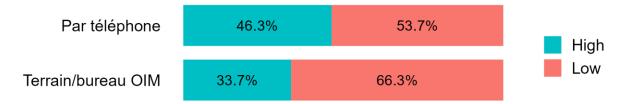


Appendix X: Frequencies of Business Profitability (RES) by Each Independent Variable

Note. Variables are presented in the order in which they appear in the questionnaire, and only variables used in analyses are included (i.e., variables recoded for regression analysis).

Business Profitability | by InterviewType

Single-select | N = 1,917

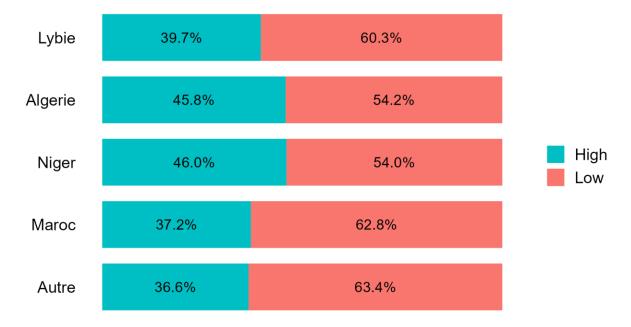


Business Profitability | by Country



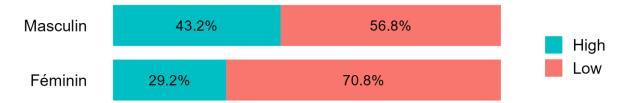
Business Profitability | by CountryOfReturn

Single-select | N = 1,917

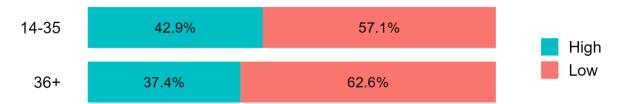


Business Profitability | by Gender

Single-select | N = 1,917

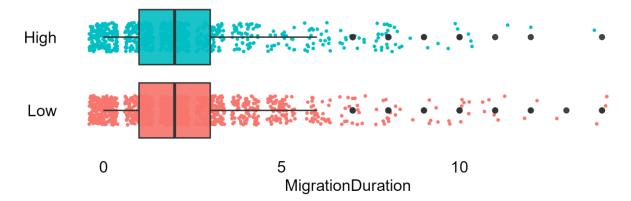


Business Profitability | by AgeGroup



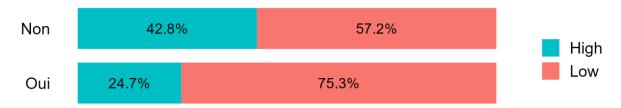
Business Profitability | by Migration Duration

Single-select | N = 1,917

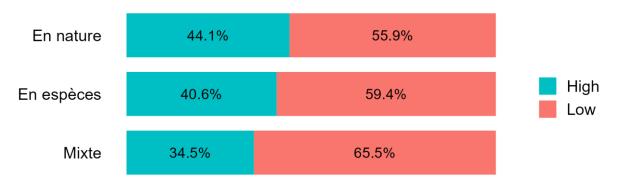


Business Profitability | by Disabled

Single-select | N = 1,917

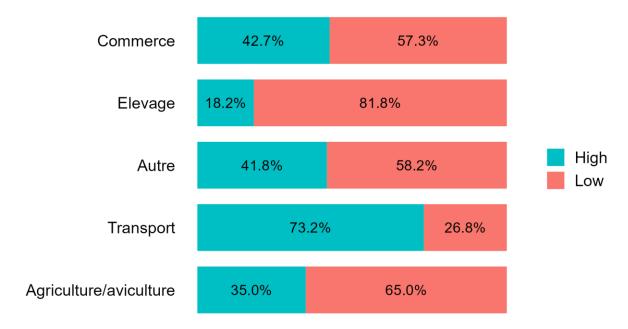


Business Profitability | by ReceivedSupportAs



Business Profitability | by BusinessType

Single-select | N = 1,917



Business Profitability | by BusinessMembers

Single-select | N = 1,917

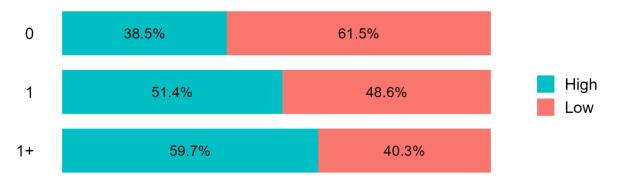


Business Profitability | by ReceivedIOMBusinessAdvice Single-select | N = 1,917

Non 39.4% 60.6% High
Oui 44.6% 55.4%

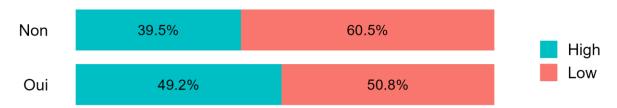
Business Profitability | by EmployeeNumber

Single-select | N = 1,917

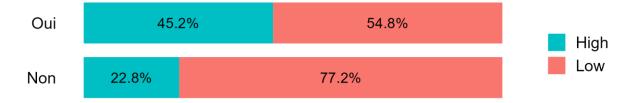


Business Profitability | by CoronalmpactOnBusiness

Single-select | N = 1,917



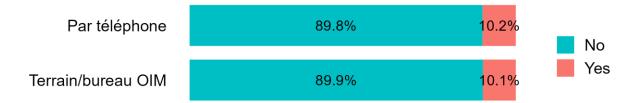
Business Profitability | by FirstChoice



Appendix X: Frequencies of Intentions to Migrate (RES) by Each Independent Variable

Note. Variables are presented in the order in which they appear in the questionnaire, and only variables used in analyses are included (i.e., variables recoded for regression analysis).

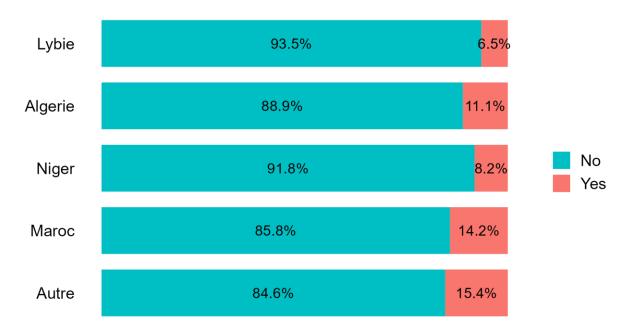
Plan to Migrate Again | by InterviewType Single-select | N = 1,917



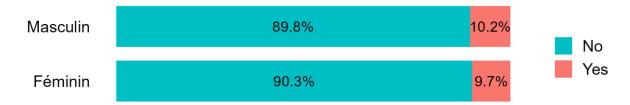
Plan to Migrate Again | by Country



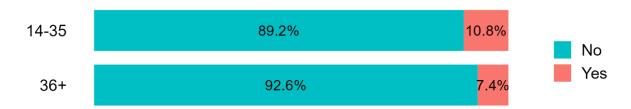
Plan to Migrate Again | by CountryOfReturn Single-select | N = 1,917



Plan to Migrate Again | by Gender Single-select | N = 1,917

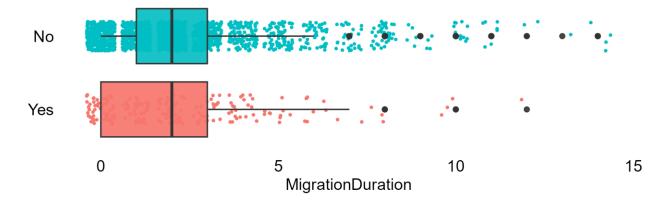


Plan to Migrate Again | by AgeGroup Single-select | N = 1,917



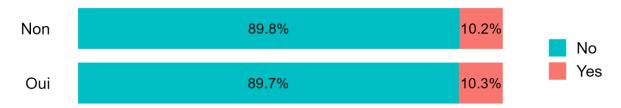
Plan to Migrate Again | by Migration Duration

Single-select | N = 1,917

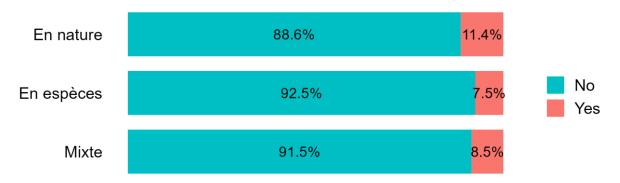


Plan to Migrate Again | by Disabled

Single-select | N = 1,917

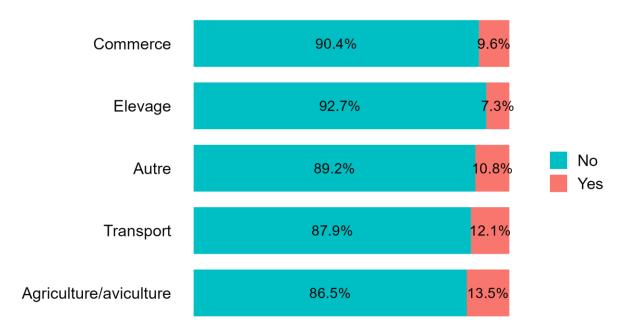


Plan to Migrate Again | by ReceivedSupportAs

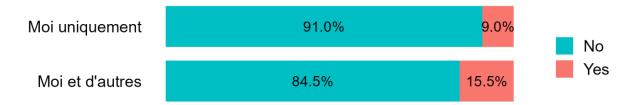


Plan to Migrate Again | by BusinessType

Single-select | N = 1,917



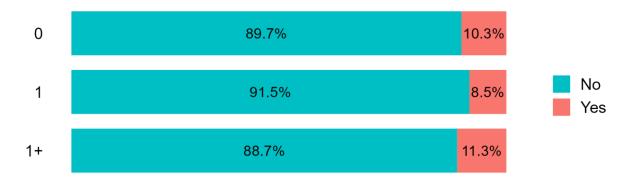
Plan to Migrate Again | by BusinessMembers Single-select | N = 1,917



Plan to Migrate Again | by ReceivedIOMBusinessAdvice Single-select | N = 1,917



Plan to Migrate Again | by EmployeeNumber Single-select | N = 1,917



Plan to Migrate Again | by CoronalmpactOnBusiness

Single-select | N = 1,917



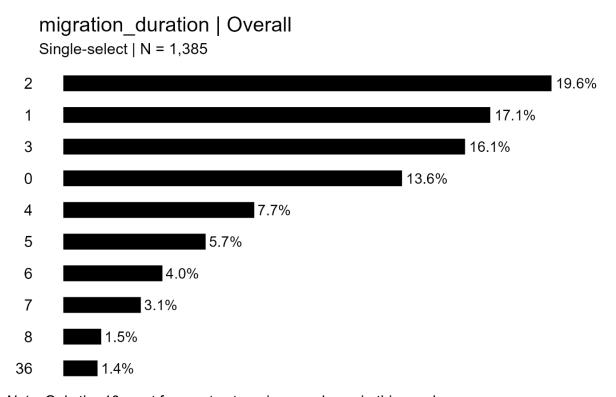
Plan to Migrate Again | by FirstChoice



Appendix X: Frequencies of RSS Variables

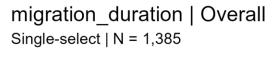
Note. Each variable has two graphs. The first graph shows frequencies from the raw data, whereas the second graph shows frequencies after recoding for regression analysis. The number of respondents is provided in the subtitle of each graph. Typically, the second graph has fewer answer options, and a smaller number of observations. That is because some answer options were grouped and and some missing answers or outliers were removed for regression analysis.

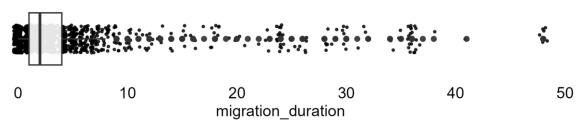
Variables are presented in the order in which they appear in the questionnaire, and only variables used in analyses are included. Dependent variables are presented in the main text.



Note. Only the 10 most frequent categories are shown in this graph.

For regression analysis, converted to continuous and recoded as:





TrainingDuration | Overall

Single-select | N = 615



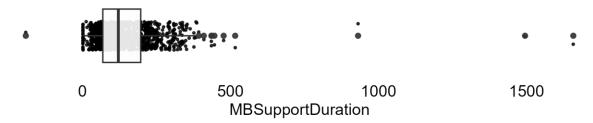
For regression analysis, recoded as:

TrainingDuration | Overall



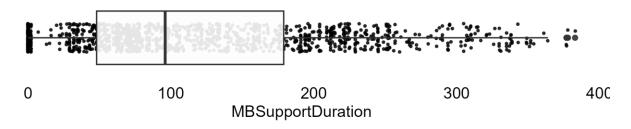
MBSupportDuration | Overall

Single-select | N = 1,182



For regression analysis, recoded as:

MBSupportDuration | Overall



MBAssistanceDuration | Overall

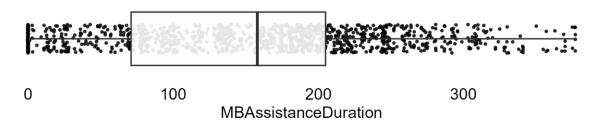
Single-select | N = 1,184



For regression analysis, recoded as:

MBAssistanceDuration | Overall

Single-select | N = 1,385



sex | Overall

Single-select | N = 1,385

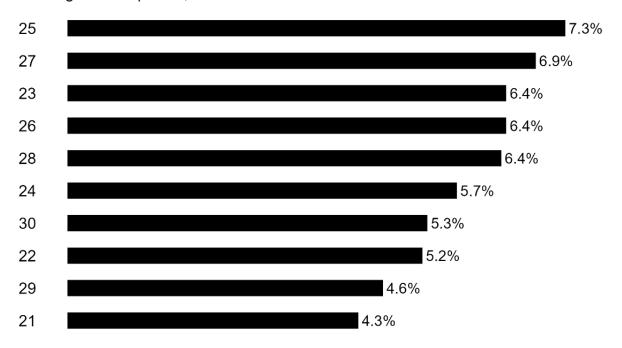


For regression analysis, recoded as:



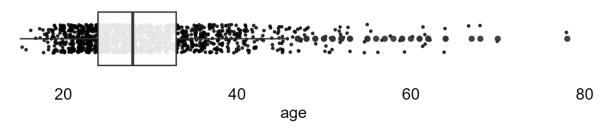


age | Overall Single-select | N = 1,385



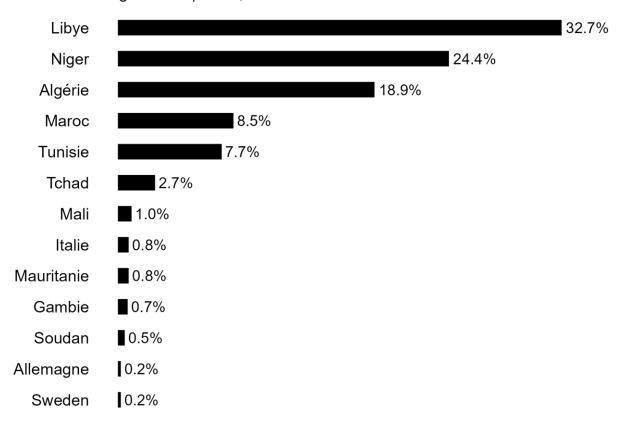
For regression analysis, converted to continuous and recoded as:

age | Overall



return_country | Overall

Single-select | N = 1,385



Note. Only answers that were cited more than 0.1% of the times are shown in this graph.

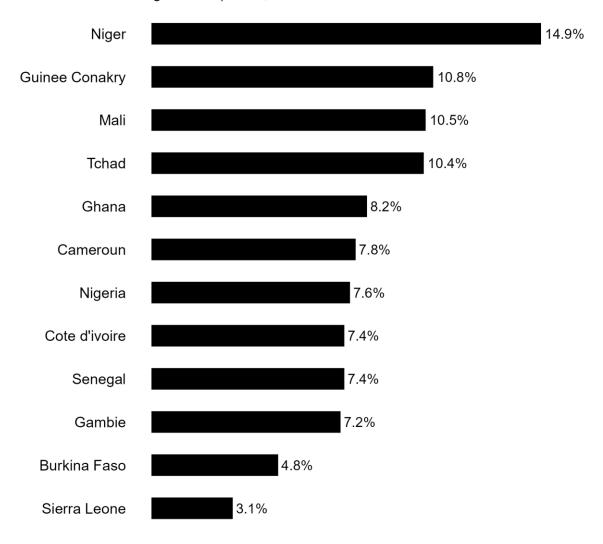
For regression analysis, recoded as:

return_country | Overall



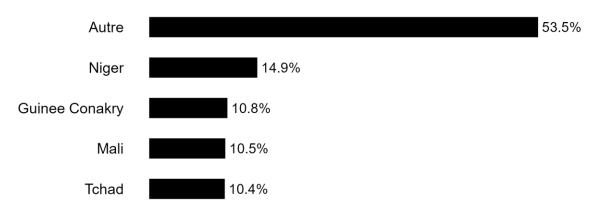
origin_country | Overall

Single-select | N = 1,385



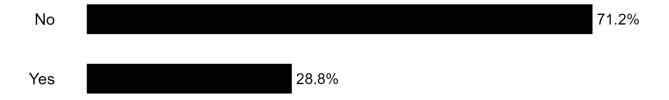
For regression analysis, recoded as:

origin_country | Overall Single-select | N = 1,385



FinancialServices | Overall

Single-select | N = 1,196



For regression analysis, recoded as:

FinancialServices | Overall



Training | Overall

Single-select | N = 1,196



For regression analysis, recoded as:





SocialSupport | Overall

Single-select | N = 1,196



For regression analysis, recoded as:

SocialSupport | Overall

Single-select | N = 1,385



MaterialAssistance | Overall

Single-select | N = 1,196



For regression analysis, recoded as:

MaterialAssistance | Overall



MedicalSupport | Overall

Single-select | N = 1,196



For regression analysis, recoded as:

MedicalSupport | Overall



PsychosocialSupport | Overall

Single-select | N = 1,196



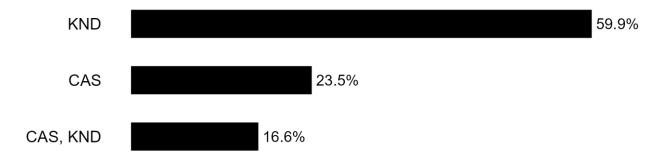
For regression analysis, recoded as:

PsychosocialSupport | Overall



MicrobusinessFormOfAssistance | Overall

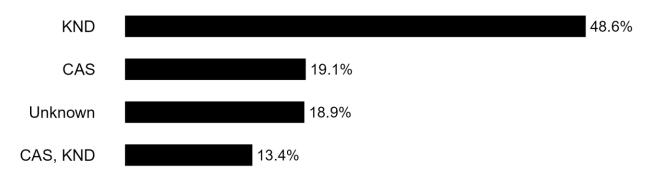
Single-select | N = 1,123



For regression analysis, recoded as:

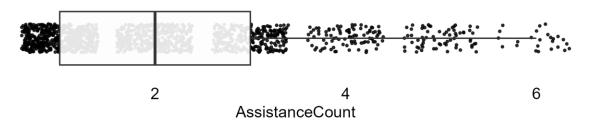
MicrobusinessFormOfAssistance | Overall

Single-select | N = 1,385



AssistanceCount | Overall

Single-select | N = 1,385



Note. This is an engineered variable.

Business management training

From personal notes:

Cloture de l'initiative conjointe des 5 dernières années

Afrique de l'Ouest et Corne—16 pays

2021—avril 2023 était dernière phase*

C'est des retournés volontaires, qui sont accompagnés par l'OIM

[Afrique de l'Ouest, possibly Sahel]

[The Join Initiative was launched in 2016]

From Induction for new staff:

"The EU-IOM Joint Initiative (JI) for Migrant Protection and Reintegration in the Sahel and Lake Chad region was launched in April 2017 and implemented in 13 countries (Burkina Faso, Cameroon, Chad, Côte d'Ivoire, The Gambia, Ghana, Guinea, Guinea Bissau, Mali, Mauritania, Niger, Nigeria, and Senegal)"

The 2nd phase of the JI funded by DG INTPA under the NDICI started in November 2021 and is ending early 2023.*

OBJECTIVE I Protection and AVRR:

"Improve PROTECTION, provide assistance and enable the assisted VOLUNTARY RETURN of vulnerable and stranded migrants"

ASSISTANCE TO VOLUNTARY RETURN (AVR): Migrants who want to return will receive AVR assistance in the form of pre departure counselling, travel allowance and transportation. They will also receive immediate assistance upon arrival.

OBJECTIVE II Reintegration

"Improve theREINTEGRATION of returning migrants and strengthen national structures and capacities in terms of managing reintegration in a dignified and sustainable manner"

REINTEGRATION ACTIVITIES: Following counseling and individual orientation of returnees, reintegration assistance is provided. The assistance can be individual, collective, or community-wide as appropriate. Evaluations are carried out in order to monitor and assess the success of these activities.

Read Document, Joint Initiative's Framework SOPs on AVRR, e.g., p. 14