#### APPENDIX II

## **Statistical Analysis**

A total of 216 respondents answered all or part of the survey. Of the 216 respondents, 173 answered as members of the diaspora, and 41 as non-immigrant European inhabitants. Of those who identified their diaspora residency, most listed places in the United States, but 3 listed Canada, 2 listed Australia, 1 listed New Zealand, and 1 listed Germany. Of the group who listed which generation emigrated, 4 listed themselves, 21 listed parents, uncles, or aunts, 61 listed grandparents, 33 listed great-grandparents, and the remainder listed great-grandparents or earlier, so the sample is multigenerational-immigrant. The majority of respondents were between 46 and 75 years of age, and 58% were men. Exhibit 1 summarizes the frequencies of demographic variables.

**Exhibit 1 Frequencies for Demographic Variables** 

|            |                  | N            | Perce  | ent  |         | N  | Percent |
|------------|------------------|--------------|--------|------|---------|----|---------|
| Residency  |                  |              |        |      | Age     |    |         |
|            | Diaspora         | 17           | 3      | 81   | 18-30   | 5  | 2.3     |
|            | Europe           | 4            | 1      | 19   | 31-45   | 19 | 8.8     |
| Gender     |                  |              |        |      | 46-60   | 50 | 23.3    |
|            | Male             | 12.          | 5      | 58.1 | 61-75   | 95 | 44.2    |
|            | Female           | 7:           | 5      | 34.9 | Over 75 | 31 | 14.4    |
| Generation | (Immigrant Ances | try of Respo | ndent) |      |         |    |         |
|            | $1^{st}$         | 4            | 2.7    |      |         |    |         |
|            | $2^{\text{nd}}$  | 21           | 14.1   |      |         |    |         |
|            | $3^{\rm rd}$     | 61           | 40.9   |      |         |    |         |
|            | 4 <sup>th</sup>  | 33           | 22.1   |      |         |    |         |
|            | Earlier          | 30           | 20.1   |      |         |    |         |

#### Measures

The questionnaire had 4 main parts. The first part asked respondents to spend a few minutes viewing two different photo *collages* comprised of 17-30 different photos. The first *collage* depicted scenes with traditional foods, entertainment, clothing, family structures, religious activities, music and dancing, gender roles, work roles, buildings, and educational activity. The second *collage* depicted scenes with modern commercial foods, global entertainment, diverse family structures, technology-enhanced activity, institutional education, commercial buildings, work roles, and global financial markets. Photos for each *collage* were similar for the diaspora and European versions, but there were minor adaptations to enhance the possibility of familiarity in the different locations. Respondents were then asked to rate how much they agreed with the statements listed in Exhibit 2 when applied to each photo set—once for the traditional set and once for the modern set. Interspersed with the items for the traditional set were a truncated set of items taken from a measure of evoked nostalgia developed and validated by Pascal, Sprott, and Muehling (2002): makes me feel nostalgic, evokes fond memories, reminds me of the good old

days, is a pleasant reminder of the past, makes me reminisce about a previous time, and helps me recall pleasant memories. The third part of the survey asked respondents multiple-item opinions about current immigration, immigrants, and emigration, and the fourth part asked demographic questions and provided a space for open-ended comments.

Exhibit 2

Items Used for Cultural Orientation Photo Set Evaluation

| Item*  | Modern Item Name | Traditional<br>Item Name |
|--|------------------|--------------------------|
| Makes me feel secure in my personal relationships                      | ModPersSec       | TradPersSec              |
| Gives me a sense of belonging  | ModBelong        | TradBelong               |
| Makes me uncomfortable or nervous**                                    | ModUncomft       | TradUncomft              |
| Makes me feel financially secure                                       | ModFincSec       | TradFinc Sec             |
| Gives me an opportunity to be myself without judgment from others      | ModCloseFr       | TradCloseFr              |
| Makes me feel like I will always have close friends and family members | ModBeMyself      | TradBeMyself             |
| Feels exciting or adventurous  | ModExciting      | TradExciting             |
| Feels familiar or comfortable  | ModComft         | TradComft                |
| I understand and identify with the lifestyle depicted here             | ModIdentify      | TradIdentify             |

<sup>\*1=</sup>Strongly Disagree 2=Disagree 3=Slightly Disagree 4=Neither Agree Nor Disagree 5=Slightly Agree 6=Agree 7=Strongly Agree \*\*Reverse-scored

Exploratory factor analysis using principal components with varimax rotation was performed on all measures. The nostalgia measure converged on a single factor, which is consistent with prior research (Pascal, Sprott, and Muehling, 2002), and elicited strong internal consistency, Cronbach's alpha of 0.932. Exhibit 3 lists the results of factor analysis on cultural orientation, with three factors emerging—traditional orientation, modern orientation, and cultural discomfort. Scores for each of the factors were used for further analysis as dependent variables. Factors emerged as expected, with consistency of feelings about both traditional and modern photo sets. There was some range restriction for the third variable—cultural discomfort—most respondents rated discomfort very low for both sets of photos. Because of the range restriction, the third variable was not useful for further analysis as a dependent variable. Item loadings greater than 0.5 were relevant to scoring and identification with the emergent factors. Internal consistency for Traditional and Modern Orientation were strong, with Cronbach's alpha of 0.871 for both factors.

#### Exhibit 3

## **Traditional-Modern Orientation Factor Analysis**

## Rotated Component Matrix<sup>a</sup>

Orientation Component

|              | Traditional | Modern | Discomfort | Communalities |
|--------------|-------------|--------|------------|---------------|
| ModPersSec   | 035         | .805   | 049        | .651          |
| ModBelong    | 060         | .855   | .001       | .735          |
| ModUncomft   | 145         | .479   | .660       | .686          |
| ModFincSec   | .148        | .535   | 497        | .555          |
| ModCloseFr   | .063        | .799   | 011        | .643          |
| ModBeMyself  | .027        | .717   | 148        | .536          |
| ModExciting  | .179        | .543   | 204        | .369          |
| ModComft     | 009         | .728   | .292       | .616          |
| ModIdentify  | 145         | .717   | .197       | .574          |
| TradPersSec  | .779        | .056   | 093        | .619          |
| TradBelong   | .850        | 028    | .038       | .725          |
| TradUncomft  | .448        | 114    | .613       | .589          |
| TradFincSec  | .581        | .112   | 443        | .547          |
| TradCloseFr  | .805        | .113   | 026        | .661          |
| TradBeMyself | .798        | 039    | 108        | .650          |
| TradExciting | .607        | .024   | 155        | .393          |
| TradComft    | .779        | 013    | .230       | .660          |
| TradIdentify | .761        | 120    | .235       | .649          |

|             |       | Initial Eigenvalues After Rotation |              |       |               |              |
|-------------|-------|------------------------------------|--------------|-------|---------------|--------------|
| Component   | Total | % of Variance                      | Cumulative % | Total | % of Variance | Cumulative % |
| Modern      | 4.818 | 26.765                             | 26.765       | 4.814 | 26.745        | 26.745       |
| Traditional | 4.447 | 24.706                             | 51.472       | 4.447 | 24.706        | 51.451       |
| Discomfort  | 1.595 | 8.859                              | 60.331       | 1.598 | 8.880         | 60.331       |

One additional measure of internal consistency was determined by comparing factor means with omnibus choices of which sets of photos were preferred by respondents—the traditional set, the modern set, both sets equally, or neither set. One-way ANOVA results show significant difference between groups for Traditional Mean Score (F=10.504, df=3; p<0.001) and Modern Mean Score (F=15.135, df=3; p<0.001) in the expected directions, with respondents preferring the Traditional set of photos scoring 5.09 on the traditional items compared to 3.7 on the modern items. Respondents who found both sets equally agreeable had more centrist item scores, and those who found neither set agreeable had the lowest mean item scores.

Exhibit 4
Means by Photo Set Preference

| Photo Set Preference | N   | Percent | Traditional Orientation Mean Score | Modern Orientation<br>Mean Score |
|----------------------|-----|---------|------------------------------------|----------------------------------|
| Trad                 | 120 | 56      | 5.0925                             | 3.7009                           |
| Mod                  | 21  | 10      | 4.4048                             | 4.1369                           |
| Both                 | 51  | 24      | 4.5662                             | 4.8227                           |
| Neither              | 15  | 7       | 3.8929                             | 3.7667                           |

In addition to these factors, two other items were assessed as independent variables —an item determining feelings of financial security (I feel financially secure) and an item asking the respondent if technology was changing the community more than immigration. These items were less invasive than asking income and education levels.

The dependent variable items underwent exploratory factor analysis using principal components with varimax rotation as well. Results are presented in Exhibit 5. Items were chosen to measure feelings regarding emigration, economic effects of immigration, and cultural effects of immigration. Several sources were consulted regarding typical measures of immigration, including Cox, Lienesch and Jones (2017), Gallup (2019), and the Guardian (2019). After selection of items, they were reviewed through a small focus-group pilot study, and then modified based on feedback from respondents. The exploratory factor analysis resulted in three different factors—feelings about emigration, feelings about immigration effects at the societal level, and feelings about immigration effects at the personal or daily-life level. Items were retained if their loadings were 0.50 or greater. Internal consistency was measured using Cronbach's alpha, with the following results: Emigration: 0.571, Societal: 0.846, and Personal: 0.815.

Exhibit 5

Migration (Emigration and Immigration) Affect -- Factor Analysis

Rotated Component Matrix<sup>a</sup>

| •   | Migra    | ation Comp | onent |               |
|---|----------|------------|-------|---------------|
|   | Societal | Personal   | Emigr | Communalities |
| I feel sad when close friends and family move to another place          | .010     | .239       | .778  | .662          |
| I miss my close friends and family                                      | 019      | 178        | .626  | .424          |
| Friends and family leaving my community upsets me more than immigration | .187     | .155       | .774  | .657          |
| I don't mind working with non-European immigrants                       | .185     | .814       | 031   | .698          |
| I'd feel fine if someone in my family marries an immigrant              | .376     | .631       | .137  | .558          |
| I don't mind when someone with an accent waits on me or serves me       | .123     | .718       | .063  | .535          |
| Immigrants do a good job in the workplace                               | .314     | .665       | .104  | .552          |
| I don't mind immigrants from faraway places, even non-Europeans         | .548     | .568       | 007   | .623          |
| Immigrants improve my financial condition                               | .501     | .366       | .109  | .397          |
| Immigrants are good for the economy                                     | .639     | .564       | .000  | .726          |
| I am concerned that immigrants are changing my community**              | .763     | .313       | 113   | .692          |
| Immigrants threaten my way of life**                                    | .798     | .131       | .136  | .673          |
| Immigrants from unfamiliar places tend to increase crime**              | .733     | .164       | .041  | .566          |
| Illegal or undocumented immigration bothers me**                        | .698     | .185       | .101  | .532          |

|            |       | Initial Eigenvalu | es           | After Rotation |               |              |  |  |
|------------|-------|-------------------|--------------|----------------|---------------|--------------|--|--|
| Component  | Total | % of Variance     | Cumulative % | Total          | % of Variance | Cumulative % |  |  |
| Society    | 5.570 | 39.784            | 39.784       | 3.529          | 25.206        | 25.206       |  |  |
| Personal   | 1.603 | 11.447            | 51.230       | 3.083          | 22.018        | 47.225       |  |  |
| Emigration | 1.124 | 8.025             | 59.256       | 1.684          | 12.031        | 59.256       |  |  |

#### **RESULTS**

# **Summary Statistics**

Means and standard deviations for independent and dependent variables are presented in Exhibit 6. The sample was slightly more Traditional (Mean=4.804, sd=0.997) than Modern (Mean=4.033, sd=1.081) in its orientation. Traditional scenarios evoked a high degree of Nostalgia on average (Mean=5.632, sd=1.055), and respondents tended to feel Financially Secure (Mean=5.58, sd=1.388). The sample as a whole believed Technology was affecting their community more than immigration (Mean =5.35, sd=1.520), although there was more variation in those last two beliefs than in the other independent variables.

Exhibit 6
Summary Results

|                               | N   | Minimum* | Maximum* | Mean*  | Std. Deviation |
|-------------------------------|-----|----------|----------|--------|----------------|
| Traditional Orientation Score | 206 | 1.88     | 7.00     | 4.8038 | .99742         |
| Modern Orientation Score      | 210 | 1.00     | 7.00     | 4.0339 | 1.08170        |
| Nostalgia Score               | 207 | 2.00     | 7.00     | 5.6317 | 1.05530        |
| Financial Security            | 196 | 1.00     | 7.00     | 5.58   | 1.388          |
| Technology Change             | 198 | 1.00     | 7.00     | 5.35   | 1.520          |
| Immigration's Societal Effect | 204 | 1.17     | 7.00     | 4.7023 | 1.30484        |
| Immigration's Personal Effect | 201 | 1.50     | 7.00     | 5.6308 | 1.01165        |
| Emigration                    | 201 | 1.00     | 7.00     | 5.2150 | .98919         |

<sup>\*1=</sup>Strongly Disagree 2=Disagree 3=Slightly Disagree 4=Neither Agree Nor Disagree 5=Slightly Agree 6=Agree 7=Strongly Agree

The sample as a whole was more positive than negative about immigration, more so at the personal level (Mean=5.63; sd=1.011) than at the societal level (Mean=4.702, sd=1.304), but still positive. The difference at the two levels might be attributable to some response bias at the personal level, with respondents reluctant to express personal negative feelings about immigration or immigrants. On the other hand, the results may also be due to one of the remedies often suggested as a means of improving relations with unfamiliar others—getting to know someone at a personal level can improve international and inter-ethnic relations. The sample as a whole viewed emigration from the community with sadness or as a disruption to the community (Mean=5.215; sd=0.989).

## **Independent Variable Effects**

Analysis included 2 main tests about immigration (societal and personal) and emigration: differences between the European and diaspora community and stepwise regression on each dependent variable.

MANOVA was performed on the dependent variables using *Community* as the independent variable (European or Diaspora). Results of the MANOVA were highly significant using Wilks' Lambda (F=6.116, df=3, p<0.001), so post hoc t-tests were performed. In addition to differences in the dependent variables, 3 independent variables were explored for differences among *Community: Traditional Cultural Orientation, Modern Cultural Orientation*, and *Emigration*. Exhibit 7 summarizes the results of means-testing. Members of the European community were less likely to have a *Modern Cultural Orientation* than those in the Diaspora community, but there were no significant differences in *Traditional Cultural Orientation* or in feelings of *Nostalgia*. For the dependent variables, all showed significant differences between members of the European community and the Diaspora community. Europeans were slightly less positive about immigration at both the personal and societal levels, and were less disheartened about *Emigration* than Diaspora members.

Exhibit 7

Tests of Means for Factors and Dependent Variables

| Factor                           | Community | N   | Mean     | Std.      | df     | Sig. (2- | Mean       |
|----------------------------------|-----------|-----|----------|-----------|--------|----------|------------|
| ractor                           | Community | 11  | ivican   | Deviation | ui     | tailed)  | Difference |
| Traditional Cultural Orientation | Diaspora  | 166 | 4.7818   | .97486    | 203    | .517     | 11559      |
| Traditional Cultural Orientation | European  | 39  | 4.8974   | 1.10875   | 52.657 | .552     |            |
| Modern Cultural Orientation      | Diaspora  | 169 | 4.1094*  | 1.07098   | 207    | .038     | .39440     |
|                                  | European  | 40  | 3.7150*  | 1.09565   | 57.946 | .044     |            |
| Nostalgia                        | Diaspora  | 167 | 5.6475   | 1.00798   | 204    | .659     | .08340     |
|                                  | European  | 39  | 5.5641   | 1.26214   | 49.910 | .702     |            |
| Dependent Variables              |           |     |          |           |        |          |            |
| Immigration's Societal Effect    | Diaspora  | 166 | 4.7950** | 1.2095    | 200    | .002     | .72002     |
| Immigration's Societal Effect    | European  | 37  | 4.0060** | 1.2613    | 49.509 | .006     |            |
| Immigration's Days and Effect    | Diaspora  | 164 | 5.7373** | .96666    | 198    | .001     | .59146     |
| Immigration's Personal Effect    | European  | 36  | 5.1458** | 1.09606   | 47.674 | .004     |            |
| Emigration                       | Diaspora  | 164 | 5.2988*  | .95243    | 198    | .010     | .46545     |
| Emigration                       | European  | 36  | 4.8333*  | 1.08818   | 47.473 | .022     |            |

Next, regression analysis was performed on each of the three dependent variables using all the independent variables: *Community* (1=Diaspora, 2=Europe), *Traditional Cultural Orientation*, *Modern Cultural Orientation*, evoked *Nostalgia*, *Financial Security*, felt *Technological Change*, *Gender* (1=Male, 2=Female), and *Age*. Exhibit 8 shows the correlation matrix for the continuous independent variables. As expected, evoked *Nostalgia* is correlated with *Traditional Cultural Orientation*; and felt *Financial Security* is associated with *Modern Cultural Orientation*, felt *Technological Change*, and *Age*. In order to limit the effect of multicollinearity on the regression analyses, stepwise regression was used to determine which variable(s) had the largest influence on each dependent variable. Exhibit 9 presents the results.

Exhibit 8

Correlation Matrix

|                                  | Traditional<br>Cultural<br>Orientation | Modern<br>Cultural<br>Orientation | Nostalgia | Financial<br>Security | Technological<br>Change | Age |
|----------------------------------|--|-----------------------------------|-----------|-----------------------|-------------------------|-----|
| Traditional Cultural Orientation | 1                                      |                                   |           |                       |                         |     |
| Modern Cultural Orientation      | .006                                   | 1                                 |           |                       |                         |     |
| Nostalgia                        | .772**                                 | 032                               | 1         |                       |                         |     |
| Financial Security               | .047                                   | .207**                            | 018       | 1                     |                         |     |
| Technological Change             | 066                                    | .020                              | 044       | .231**                | 1                       |     |
| Age                              | 133                                    | .057                              | 016       | .190**                | .034                    | 1   |

<sup>\*\*</sup> Correlation is significant at the 0.01 level (2-tailed).

<sup>\*</sup>Correlation is significant at the 0.05 level (2-tailed).

Exhibit 9 **Results of Stepwise Multiple Regression on** Immigration's Societal Effect, Immigration's Personal Effect and Emigration

| Regr | Dependent                        | Significant<br>Independent             | Overall  |      | Std     | Adj   |        |      |
|------|----------------------------------|--|----------|------|---------|-------|--------|------|
| No.  | Variable                         | Variable                               | Model- F | Sig  | B-Coeff | R-Sq  | t      | Sig  |
| 1    | Immigration's<br>Societal Effect |  | 11.156   | .000 |         | 0.137 |        |      |
|      |                                  | Technological<br>Change                |          |      | .251    |       | 4.342  | .000 |
|      |                                  | Traditional<br>Cultural<br>Orientation |          |      | 238     |       | -2.708 | .007 |
|      |                                  | Modern<br>Cultural<br>Orientation      |          |      | .186    |       | 2.299  | .023 |
|      |                                  |  |          |      |         |       |        |      |
| 2    | Immigration's<br>Personal Effect |  | 8.711    | .000 |         | 0.138 |        |      |
|      |                                  | Technological<br>Change                |          |      | .187    |       | 2.599  | .010 |
|      |                                  | Community                              |          |      | 236     |       | -3.222 | .002 |
|      |                                  | Age                                    |          |      | 232     |       | -3.220 | .002 |
|      |                                  | Financial<br>Security                  |          |      | .144    |       | 2.055  | .041 |
|      |                                  |  |          |      |         |       |        |      |
| 3    | Emigration                       |  | 7.061    | .000 |         | .087  |        |      |
|      |                                  | Gender                                 |          |      | 209     |       | -3.012 | .003 |
|      |                                  | Technological<br>Change                |          |      | .173    |       | 2.489  | .014 |
|      |                                  | Nostalgia                              |          |      | .167    |       | 2.415  | .017 |

| 3 | Emigration |                         | 7.061 | .000 |      | .087 |        |      |
|---|------------|-------------------------|-------|------|------|------|--------|------|
|   |            | Gender                  |       |      | 209  |      | -3.012 | .003 |
|   |            | Technological<br>Change |       |      | .173 |      | 2.489  | .014 |
|   |            | Nostalgia               |       |      | .167 |      | 2.415  | .017 |

For feelings about societal effects of immigration, the most significant influences were Traditional Cultural Orientation, Modern Cultural Orientation, and feelings that Technological Change is affecting the community more than immigration. Respondents with a Traditional Cultural Orientation responded less favorably to Immigration's Societal Effect (β=-0.238, t=-2.708, p<0.01), whereas Modern Cultural Orientation had the opposite effect (β=0.186, t=2.299, p<0.05). Respondents who felt that *Technological Change* is affecting their community more than immigration responded most favorably to perceived *Immigration's Societal Effect*  $(\beta=0.251, t=4.342, p<0.001)$ . Feelings of *Immigration's Personal Effect* were also strongly affected by *Technological Change* (β=0.187, t=2.599, p<0.01). Other variables affecting feelings of *Immigration's Personal Effect* were *Community* membership ( $\beta$ =-0.236, t=-3.222, p<0.01), *Age* ( $\beta$ =-0.232, t=-3.220, p<0.01), and *Financial Security* ( $\beta$ =0.144, t=2.055, p<0.05). Europeans have less positive feelings about *Immigration's Personal Effects*; *Age* was negatively related to feelings about *Immigration's Personal Effect*, and *Financial Security* tended to increase positivity of *Immigration's Personal Effects*. Last, sad or disconcerting feelings about *Emigration* were more associated with women ( $\beta$ =-0.209, t=-3.012, p<0.01) than men. Those who felt strong *Technological Change* ( $\beta$ =0.173, t=2.489, p<0.05) and *Nostalgia* ( $\beta$ =0.167, t=2.415, p<0.05) were also more strongly affected by *Emigration* or people leaving their communities. Overall, each dependent variable was affected by a feeling that *Technological Change* is affecting respondents' communities more than immigration, while *Immigration's Societal Effect* were also influenced by respondents' cultural orientations. *Financial Security, Age*, and national *Community* membership (Europe vs. Diaspora) also influenced *Immigration's Personal Effect*, while *Gender* and *Nostalgia* influenced feelings about *Emigration* from the community.