Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 10392 - 10406
Received 05 March 2021; Accepted 01 April 2021.

The Impact of COVID-19 Pandemic on Business Activities and Lifestyle: Evidence from Egypt

OsamaWagdi[1*],Rehab Rabie[2]
[1]FacultyofEconomicsand InternationalTrade,EgyptianChineseUniversity(ECU),Cairo,Egypt.
[2]FacultyofBusiness Administration,Economics&PoliticalScience, TheBritish UniversityinEgypt(BUE),Cairo,Egypt.
[*]osamawagdi_ta@yahoo.com

ABSTRACT

The study investigates the impact of the Covid-19 pandemic on business activities and lifestyle in Egypt. The studyused daily and monthly average data from 15 February 2020 to 19 January 2021. The study found the correlationbetween workplaces mobility rate and residential mobility (staying at home) rate during the Covid-19 pandemic inEgypt; 77.1% of residential mobility (staying at home) reasons back to workplaces mobility rates. on another side;the difference between aspects of lifestyle (retail-recreation; grocery pharmacy; Parks; transit stations; Workplaces;Residential) at the National Level; and the difference of workplaces mobility rates between Egyptian governorates;both are significant at 1%.Finally; some business activity types have an impact on workplaces mobility rates underCovid-19, these business activities related to manufacturing and foreign tourism are significant at 1%. On the otherhand, the study didn't find this impact on Agriculture, Fishing, Domestic Tourism, and Mining. There is still a needformore futurestudiesforbothbusinessactivitiesandlifestyle,especiallywithinthe secondwaveofCovid-19.

Keywords
COVID-19,BusinessActivities,Lifestyle,Egypt

JELClassification
M10,J45

1. TheMethodologicalFramework

Introduction:

The coronavirus pandemic has caused a global impact never seen before in modern history (Saab, et al., 2020).Confronted by challenging and complex problems given the health, social context and economic challenges it poses,Covid-19 has policymakers working under a profound ambiguity. Also, the effect of Covid-19 crisis varies enormouslywithin and across the continents, which have an important effect on countries in different aspects such as crisismanagementefforts andcountries'responsestrategy (Allain-Dupré,Chatry,Michalun,&Moisio,2020).

The pandemic was immediately and widely declared as a public health crisis of international significance by theWorld Health Organisation (WHO), in January 2020 (Saab, et al., 2020). WHO declared on February 4, 202,1 that 223countries are suffering from Covid19, the number of confirmed cases worldwide is 103631793 and the number ofconfirmeddeathsis2251613(WHO,2021).

Governments, in coping with coronavirus, have taken substantial steps to reduce its threats. Therefore, in response toheightened security measures, activities were at an absolute standstill in many nations (Caduff, 2020). Covid-19 hasdeveloped several problems due to its virulence,as it enormously hamperedthe economies aroundthe worldbylimiting employability or even the income of individuals, however, this influence differed from one nation to another;nonethelessmanycountrieshavebeensufferingfromtheproblemsontheeconomic matters(Elsafty&Ragheb,2020).

As countries tightened their protection, this resulted in shut-down of manufacturing, which impacts businesses allover the world including in aviation, tourism, fashion, entertainment, and automobile manufacture; the crisis has alsointensified the difficulties facing millions of employees who are threatened by the possibility of losing jobs (Mitra,Chaudhuri, Mitra, Pramanick, & Zaman, 2020). It has been noticed that not only this pandemic changed the wayhumans view their environment but also forced the world to re-adjust their preferences and create new collaborations,as politicians are exerting every measure to cope with the catastrophe by using monetary, economic, and marketsolutions as wellas financialassistanceof families andbusinesses topreservenationalstandards andeconomicstability(Rezk,et al., 2020).

Businessand society underCOVID-19

The year 2020 was especially noteworthy, with many aspects of business and life-changing; locking down and limitingeconomic activity was a decision adopted by many cities and countries (Bapuji et al., 2020). Throughout the world, thelatest epidemic had serious economic effects, and it did not seem like every nation would be unaffected. Not only did

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 10392 - 10406
Received 05 March 2021; Accepted 01 April 2021.

thishave economic implications, but also all societies were impacted, which contributed to drastic shifts in the behaviour ofcompaniesandconsumers(DonthuandGustafsson,2020).

Many studies were performed concerning business practises during this pandemic, such as tourism & air transportmobility (Selim, Aidrous, & Semenova, 2020) (Nižetić, 2020) (Sigala, 2020; Qiu et al., 2020; Gössling et al., 2020;Higgins-Desbiolles, 2020;Kaushal and Srivastava 2021), retail (Loske, 2020; Richards and Rickard, 2020, Bhatti et al.,2020; Rukuni and Maziriri, 2020), education (Chick et al., 2020; Zhu and Liu, 2020; Krishnamurthy 2020) (Mahmood,2020) (Fernandez & Shaw, 2020) (Helliwell, et al., 2020) (Al-Hosan, AlRajeh, & Arnout, 2020), communication (Clark-Ginsberg & Petrun Sayers, 2020), sustainability (Jones & Comfort, 2020) (Al-Dabbagh, 2020), and financial investment(Ortmann et al., 2020; Talwar et al., 2021) (Cozza, et al., 2020) (Bretas & Alon, 2020) (Usman, Ali, Riaz, & Zubair,2020) (Rababah, Al-Haddad, Sial, Chunmei, & Cherian, 2020) (Van Eck, Van Melik, & Schapendonk, 2020) (Ratten,2020). The presentstudy, however,worksona comparisonoftheseactivities.

ThebusinessimplicationsofCOVID-19inEgypt

Egypt wasn't away from the negative impact of the Covid19 pandemic, as it was announced by the World HealthOrganisation (WHO) on the 10th of February 2021 that the number of confirmed cases is 170780 and the number ofconfirmeddeathsis9751(WHO,2021);see FigureNo. (1).

The Egyptian administration recognized that life would never be the same as before the Covid-19 pandemic, therefore,while the government is working on preventing the virus from affecting the country, teams of experts were formed toformulate strategies for a post-Covid-19 world, built on the experiences of other nations. Many political, economic andsocialplansbeganbeing formulatedbeforethe pandemicwasundercontrol(IDSC,2020).

The impact of Covid19 crisis on the Egyptian economy was examined by Breisinger C. and others in their study as theyconcluded that besides facing a major decline in tourist activity, Egypt also experienced sharp decrease in revenuesobtained from the Suez Canal and Egyptian citizens who work abroad. The findings of their study indicates that for eachmonth of the global crisis, Covid-19 reduces the country's gross domestic product (GDP) from around 36 billion $ to 41billion$whichisabout0.7%to0.8%;inadditiontoanaverageofHouseholdexpenditureandusageprojectedtofallbetween 153 and 180 EGP per individual for each month that signifies between 9 and 10.6% of the household revenueaverage(Breisinger, Abdelatif,Raouf,&Wiebelt, 2020).

Some Egyptian sectors were significantly affected by this crisis such as the travel and tourism sector that was seriouslyimpacted due to reducing and sometimes halting of air traffic frequency; also, the Manufacturing industry was greatlyaffected due to interrupted supply chains which highly rely on trade and imported goods, accordingly assembly lineswhethercloseddown orworkedwithaveryconsiderablecapacity(TheEgyptian JuniorBusinessAssociation,2020).

Egypt'sproactiveapproachtolimitthepandemic'sfallout

The Egyptian Government has adoptedconsiderable measures to prevent the propagation of theCovid-19 virus byclosingschoolsandacademic institutionsandbanninggatheringsandmajorentertainmentevents(UNICEF,2020).

Duetotheunpredictedandsuddenjobs'lossesandriskingdebtsduringthepandemiccrisis,severalworkersarefacingan uncertain financial situation, consequently, the HR departments of various countries including Egypt give priority tothe preservation of their workers. Accordingly, Elsafty and Ragheb examined in their study the HRM (Human ResourceManagement) responsibility towards the employees in Egypt. They suggested that HR managers can optimize employeesatisfaction through several essential elements such as workplace assistance and guidance, accessibility to resources andinformation, and financial advantages. These elements should have been addressed by the organizations to optimize theirearningabilityandvaluesappropriately.(Elsafty&Ragheb,2020)

As for tourism, Egypt has adopted a number of policies aiming to reduce the negative impact of the pandemic and byencouraging the tourism industry, securing employment and wages and workers at work such as: 1) Postponing wages fortourism and food service entities. 2) Including another 100,000 families in the money transfer program that supportsworkersfromdifferentindustriesincludingthetourism;whilesettinganewhotline forthemtoreportanyunfairlayoff.
3) Providing a budget surplus of some 50 billion EGP to boost the tourism sector intending to sustain hotel operationsthroughoutthe Covid19crisis(ILO, 2020).

Studyproblem

There are many studies dealing with covid-19, but usually these studies were based on what is expected, but the currentstudy seeks to achieve what has already been done, by analysing the actual data of business activities and

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 10392 - 10406
Received 05 March 2021; Accepted 01 April 2021.

lifestyle,throughoneof theemergingeconomies,itsEgypt,sothere arethefollowingquestions
Q1: Is there correlation between workplaces mobility rates and residential mobility rates under covid-19 pandemic inEgypt?
Q2:Istherediffer encebetweenaspectsoflifestyleunder covid-19 pandemicinEgypt?
Q3: Is there difference of workplaces mobility rates under COVID-19 between Egyptian governorates.Q4:Isthereimpactofbusinessactivitiestypesonworkplacesmobilityratesunder COVID-19?

Studyhypotheses:

Accordingtotheresearch problem,itsquestions,andresearchgapthe hypothesescanbeformulatedas follows:
H1: There is no significant correlation between workplaces mobility rates and residential mobility rates under covid-19pandemicinEgypt.

H2:Thereisnosignificantdifferencebetweenaspectsoflifestyleundercovid-19pandemicinEgypt.

H3: There is no significant difference of workplaces mobility rates under COVID-19 between Egyptian governorates.

H4:Thereisno significantimpactofbusiness activitiestypeson workplacesmobilityratesunder COVID-19

Data

The daily data of the study cover the time period February 15, 2020 to January 19, 2021 and are used for both Nationaldata for Egypt as whole and individual Egyptian governorates. The data consist of components the change of retail-recreation,grocerypharmacy,parks,transitstations,workplacesandresidential(basedonsocialdistancingdataaccording to community mobility reports to COVID-19). in addition to Business Activities (Agriculture - fishing -manufacturing-domestictourism- foreigntourism-mining)asactivitiesprevalentatthelevel ofeachprovince.

2. DataDescription

Datadescriptionatnationallevel

The figures no. (2) illustrates social distancing measures at Egypt; these statistical data are based on day-to-day figures ofsixindices;thepresent changefrombaselinefromFebruary15, 2020toJanuary19, 2021:

The “Workplaces Mobility” index maintained a general negative figure, despite of recording a positive average (8.1%) inFebruary 2020, it reached the lowest average (-35.4%) in April 2020, showed gradual improvement till December 2020 (-1.7%), followed by a decrease (-13.8%) in January 2021.It was noticed that Matrouh governorate was the only one thatcontributed with a positiveaverage (4.3%).Unlike theRed SeaGovernorate thatcontributed with the leastaverage,whichis -30.162%.

Data descriptionatgovernorates level

Fromthedesmontratedfiguresno.(32)to(33),itisnoticedthatduringtheperiodoftimefrom15thFebruary2020to 19th January 2021, the “Residential Mobility” index maintained a positive figure in Egypt. It was noticed that theRed Sea Governorate contributed with the highest average, which is 10.35%, due to many reasons, including that it isthe least Egyptian governorate infected with the Coronavirus according to CNN (CNN, 2020). Unlike the North SinaiGovernoratethatcontributedwiththeleastaverage, whichis-0.035%.

3. Hypotheses Testing

Examining the correlation between workplaces mobility rates and residential mobility rates under covid-19pandemic

ThishypothesisexaminesthecorrelationbetweendevelopmentofWorkplacesmobilityratesandresidentialmobility rates under covid-19 pandemic for Egyptian society. The study used Pearson test to examine this hypothesisbased on daily data. The statistic results in Table (1) that the correlation between workplaces mobility rates andresidential mobility rates under covid-19 pandemic in Egypt, and it is significant at 1%. Table (2) show regressionanalysisforworkplacesmobilityratesasindependent variable and residentialmobilityratesdependentvariable.

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 10392 - 10406
Received 05 March 2021; Accepted 01 April 2021.

The statistical results show (F) was 1144.043, which is significant at the level of 1%, but Adjusted R Square was0.771; it mean a 77.1% of residential mobilityreasons under covid-19 pandemic in Egypt back to workplaces mobilityrates.

Now, thestudyrejectstheNullhypothesisand acceptsthefollowing alternativehypothesis:
"There is significant correlation between workplaces mobility rates and residential mobility rates under covid-19pandemic inEgypt."

Examiningthesymmetryworkplacesmobilityratesundercovid-19pandemicintheEgyptiangovernorates

This hypothesisexaminesthesymmetry Workplacesmobility ratesundercovid-19pandemicintheEgyptiangovernorates.ThestudyusedFriedmantesttoexaminethis hypothesisbased onmonthlyaveragedata.

In Table (3); the statistic results show Chi-Square was (196.01) it is significant at 1%.So that there is a differenceworkplaces mobility rates under covid-19 pandemic between the Egyptian governorates, and it is significant at 1%. Inotherwords, it canbesaidthatthecovid-19 pandemichas significanteffectontheworkplacesmobilityrates.

Now, thestudy rejectstheNullhypothesisand acceptsthefollowing alternativehypothesis:
"Thereissignificantdifferenceofworkplacesmobilityratesunder COVID-19betweenEgyptiangovernorates".

Examiningthesymmetryaspectsoflifestyleundercovid-19pandemicinEgypt

This hypothesis examines the symmetry aspects of lifestyle under covid-19 pandemic in Egypt. The study used test toexaminethishypothesisbasedondailydata.

In table (4); the previous statistic results show Chi-Square was (1135.27) it is significant at 1%.So that there is adifference aspects of lifestyle under covid-19 pandemic in Egypt and it is significant at 1%. In other words, it can be saidthat the covid-19 pandemic has significant effect on the workplaces mobility rates, According to factors that differbetweenthe Egyptiangovernorates.

Now,thestudyrejectstheNull hypothesisandacceptsthefollowing alternativehypothesis:
"Thereissignificantdifferencebetweenaspectsoflifestyleundercovid-19 pandemicinEgypt".

Examiningtheimpactofbusinessactivitiestypeson workplacesmobilityratesunderCOVID-19

This hypothesis examines the impact of business activities types on workplaces mobility rates under COVID-19. Thestudy usedPaneldataanalysisto examinethis hypothesisbased onmonthlyaveragedata.

In table (5); the statistic results show some business activities types have impact on workplaces mobility rates underCOVID-19,this business activities related to manufacturing andforeign tourism this are significant at 1%. In otherwords, it canbesaid thatthetypeofbusinessactivityhasdifferentimpactsontheworkplacesmobilityrates.

Now, thestudyrejectstheNullhypothesisandacceptsthefollowing alternativehypothesis:
"Thereis significantimpactofbusinessactivitiestypeson workplacesmobility ratesunderCOVID-19".

4. ConclusionandRecommendations

Conclusion

Aspects of life and business activities were not the same as before COVID-19; both human behaviour and companieswere affected by forced lockdown witnessed by most countries of the world. The study can only consider this epidemicasoneof the systemicrisksto humanlife,lifestyle,and businessactivities.

The study investigates the impact of the COVID-19 pandemic on business activities and lifestyle in Egypt. A dailyand monthly average data from 15 February 2020 to 19 January 2021 was used. The study found a correlation betweenworkplaces mobility rates and residential mobility (staying at home) rates under covid-19 pandemic in Egypt; 77.1% ofresidentialmobility(stayingat home)reasonsbackto workplacesmobilityrates.

On another side, there is a difference between aspects of lifestyle (retail-recreation; grocery pharmacy; parks; transitstations;workplaces;residential)attheNationalLevel;andadifferenceinworkplacesmobilityratesbetweenEgyptiangovern

orates;bothare significantat 1%.

Finally, certain business activity types have a greater influence on workplaces mobility rates during Covid19. Thesebusiness activity types related to manufacturing and international tourism are significant to 1%. However, the effectwas not seen in the following areas: Agriculture, Fishing, Domestic Tourism, andMining. There is still a needformore futureresearchinbothbusinessactivitiesandlifestyle,particularlywithinthesecondwaveofCovid-19.

Recommendations

There are more areas for future studies on this epidemic, but we need more quantitative research with comparisonacross countries and industries through actual data for 2020. Finally; the study used data consist of components thechange of retail-recreation, grocery pharmacy, parks,transit stations, workplaces and residential based on socialdistancing data which can be used this data in Egyptian health strategies to drop the spread of COVID-19. That agreeswithSahaet al., (2020) inIndia.

The crisis of covid-19 could be opportunities instead of being a constraint for business units not only at the level of Egypt, but also for all countries of the world, as they contribute to supporting digital transformation and e-commerce. In addition to increasing the scope of entrepreneurship opportunities according to Wagdi and Hasaneen(2019) this requires providing adding value to the society.

References

[1] Al-Dabbagh, Z. S. (2020). ustainable development and its role in containing crises: Corona virus pandemic crisis (COVID-19) in China as a model. 20(4), e2339.doi:10.1002/pa.2339

[2] Al-Hosan,A.M.,AlRajeh,N.M.,&Arnout,B.A.(2020).Theroleofuniversityteachingstaffmembersincognitiveawarenessandraisingthelevelofhealthprotection, value,andmoralofstudentsthroughtheCOVID-19pandemic.JournalofPublicAffairs,20(4),e2332.doi:10.1002/pa.2332

[3] Allain-Dupré,D.,Chatry,I.,Michalun,V.,&Moisio,A.(2020).TheterritorialimpactofCOVID-19:Managingthecrisisacrosslevelsofgovernment.Paris:OECD.

[4] Bapuji,H.,deBakker,F.G.A.,Brown,J.A.,Higgins,C.,Rehbein,K.,&Spicer,A.(2020).BusinessandSocietyResearchinTimesoftheCoronaCrisis.Business&Society,59(6),1067–1078.

[5] Bhatti, A., Akram, H., Basit, H. M., Khan, A. U., Raza, S. M., & Naqvi, M. B. (2020). E-commerce trends during COVID-19 Pandemic. International Journal ofFutureGenerationCommunicationandNetworking,13(2),1449-1452.

[6] Breisinger, C., Abdelatif, A., Raouf, M., & Wiebelt, M. (2020). COVID-19 and the Egyptian economy-Estimating the impacts of expected reductions in tourism,SuezCanalrevenues,andremittances.IntlFoodPolicyResInst.Retrievedfromhttps://knowledge4food.net/wp-content/uploads/2020/06/IFPRI_COVID_EGY_0301.pdf

[7] Bretas, V. P., & Alon, I. (2020). The impact of COVID-19 on franchising in emerging markets: An example from Brazil. Global Business and OrganizationalExcellence,39(6),6-16.doi:10.1002/joe.22053

[8] Caduff,C.(2020).Whatwentwrong:Coronaandtheworldafterthefullstop.MedicalAnthropologyQuarterly.

[9] CAPMAS.(n.d.).ThepopulationofEgyptnow.RetrievedFebruary10,2021,fromCentralAgencyforPublicMobilizationandStatistics:https://www.capmas.gov.eg/Pages/populationClock.aspx

[10] Chick,R.C.,Clifton,G.T.,Peace,K.M.,Propper,B.W.,Hale,D.F.,Alseidi,A.A.,&Vreeland,T.J.(2020).Usingtechnology tomaintaintheeducationofresidentsduringtheCOVID-19pandemic.Journalof surgicaleducation,77(4),729-732.

[11] Clark-Ginsberg,A.,&PetrunSayers,E.L.(2020).CommunicationmisstepsduringCOVID-19hurtthosealreadymostatrisk.ournalofContingenciesandCrisisManagement,28(4),482-484.doi:10.1111/1468-5973.12304

[12] CNN. (2020). In numbers . the ranking of Egypt's governorates with the most corona infection. Retrievedfromhttps://arabic.cnn.com/health/ article/2020/12/24/egypt-cities-coronavirus-numbers

[13] Cozza,M.,Gherardi,S.,Graziano,V.,Johansson,J.,Mondon-Navazo,M.,Murgia,A.,&Trogal,K.(2020).Covid-19asabreakdowninthetextureofsocialpractices.Gender,WorkandOrganization.doi:10.1111/gwao.12524

[14] Donthu,N.,&Gustafsson,A.(2020).EffectsofCOVID-19onbusiness andresearch.Journalofbusinessresearch,117,284.

[15] Elsafty, A.S.,&Ragheb,M.(2020).The RoleofHumanResourceManagementTowardsEmployeesRetentionDuringCovid-19PandemicinMedical SuppliesSector-Egypt. BusinessandManagementStudies,6(2),5059-5059.doi:10.11114/bms.v6i2.4899

[16] Fernandez,A.A.,&Shaw,G.P.(2020).Academicleadershipinatimeofcrisis:ThecoronavirusandCOVID-19.JournalofLeadershipStudies,14(1),39-45.doi:10.1002/jls.21684

[17] Gössling,S., Scott,D., &Hall,C. M.(2020).Pandemics, tourismand globalchange: arapidassessmentofCOVID-19.Journal ofSustainableTourism,29(1), 1-20.

[18] Helliwell,J.A.,Bolton,W.S., Burke, J. R., Tiernan,J.P., Jayne, D. G.,& Chapman,S. J.(2020). Global academic response to COVID-19: Cross-sectionalstudy. LearnedPublishing,33(4),385-393.doi:10.1002/leap.1317

[19] Higgins-Desbiolles,F.(2020).The"warovertourism":challengestosustainabletourisminthetourismacademyafterCOVID-19.JournalofSustainableTourism,29(4),551-569.

[20] IDSC.(2020).Covid-19:RestartingtheEconomy.Cairo:TheCabinet'sInformation&DecisionSupportCenter(IDSC).Retrievedfromfile:///D:/Rehab%20Researches/2-Dr%20Osama&Rehab--The%20Impact%20of%20Coronavirus%202019%20Crisis%20on%20Business/KOVID19_Consequencies/Egypt/Resources%20(Studies-Reports-Articles)/IDSC%20Report%20on%20Covid%20in%20egypt.pdf

[21] ILO.(2020).TheImpactofCOVID-19ontheTourismSector.InternationalLabourOrganization,Geneva. Retrievedfromhttps://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/briefingnote/wcms_741468.pdf

[22] Jones,P.,&Comfort,D.(2020).AcommentaryontheCOVID-19crisis,sustainabilityandtheserviceindustries.JournalofPublicAffairs,20(4),e2164.doi:10.1002/pa.2164

[23] Kaushal,V.,&Srivastava,S.(2021).HospitalityandtourismindustryamidCOVID-19pandemic:Perspectivesonchallengesandlearningsfrom India.InternationalJournalofHospitalityManagement,92,102707.

[24] Krishnamurthy, S. (2020). The future of business education: A commentary in the shadow of the Covid-19 pandemic. Journal of business research, 117, 1-5.

[25] Loske,D.(2020).TheimpactofCOVID-19ontransportvolumeandfreightcapacitydynamics:AnempiricalanalysisinGermanfoodretaillogistics.Transportation ResearchInterdisciplinaryPerspectives,6,100165.

[26] Mahmood, S. (2020). Instructional Strategies for Online Teaching in COVID-19 Pandemic. Human Behavior and Emerging Technologies. doi:10.1002/hbe2.218Marinoni,G., Van't Land, H.,&Jensen,T. (2020). TheimpactofCovid-19 onhighereducationaroundtheworld. Paris:IAUGlobalSurveyReport.

[27] Mitra,A.,Chaudhuri,T.R.,Mitra,A.,Pramanick,P.,&Zaman,S.(2020).ImpactofCOVID-19relatedshutdownonatmosphericcarbondioxidelevelinthecityofKolkata.ParanaJournalofScience andEducation,6(3),84-92.

[28] Nižetić,S.(2020).Impactof coronavirus (COVID-19)pandemiconair transport mobility,energy,andenvironment: A case study.International Journal ofEnergyResearch,44(13),10953-10961.doi:10.1002/er.5706

[29] Ortmann,R., Pelster,M.,&Wengerek,S.T.(2020).COVID-19 andinvestorbehavior. Financeresearchletters,37,101717.

[30] Qiu,R. T., Park,J., Li, S.,&Song,H. (2020).SocialcostsoftourismduringtheCOVID-19pandemic. AnnalsofTourismResearch,84,102994.

[31] Rababah, A., Al-Haddad, L., Sial, M. S., Chunmei, Z., & Cherian, J. (2020). Analyzing the effects of COVID-19 pandemic on the financial. ournal of PublicAffairs,20(4),e2440.doi:10.1002/pa.2440

[32] Ranasinghe, R., Damunupola, A., Wijesundara, S., Karunarathna, C., Nawarathna, D., Gamage, S., . . . Idroos, A. A. (2020). ourism after corona: Impacts ofCOVID 19 pandemic and way forward for tourism, hotel and mice industry in Sri Lanka. Hotel and Mice Industry in Sri Lanka. Retrieved fromhttps://papers.ssrn.com/sol3/papers.cfm?abstract_id=3587170

[33] Ratten, V. (2020). Coronavirus and international business: An entrepreneurial ecosystem perspective. Thunderbird International Business Review, 62(5), 629-634.doi:10.1002/tie.22161

[34] Rezk,M.A.,Piccinetti,L.,Radwan,A.,Salem,N.M.,Sakr,M.M.,&Khasawneh,A.(2020).EgyptbeyondCOVID19,thebestandtheworst-casescenarios.EntrepreneurshipandSustainabilityIssues,8(2),147.

[35] Richards, T. J., & Rickard, B. (2020). COVID-19 impact on fruit and vegetable markets. Canadian Journal of Agricultural Economics/Revue canadienned'agroeconomie,68(2),189-194.

[36] Rukuni, T. F., & Maziriri, E. T. (2020). Data on corona-virus readiness strategies influencing customer satisfaction

and customer behavioural intentions in SouthAfricanretailstores.Datainbrief,31,105818.

[37] Saab, R., Obeid, A., Gachi, F., Boudiaf, H., Sargsyan, L., Al-Saad, K., . . . Jeha, S. (2020). Impact of the coronavirus disease 2019 (COVID-19) pandemic onpediatric oncology care in the Middle East, North Africa, and West Asia Region: a report from the Pediatric Oncology East and Mediterranean (POEM)Group. Cancer,126(18),4235-4245.

[38] Saha, J., Barman, B., & Chouhan, P. (2020). Lockdown for COVID-19 and its impact on community mobility in India: An analysis of the COVID-19 CommunityMobilityReports,2020.Childrenandyouthservicesreview,116,105160.

[39] Schleicher,A.(2020).Theimpactofcovid-19oneducationinsightsfromeducationataglance2020.OECD.Retrievedfromhttps://www.oecd.org/education/the-impact-of-covid-19-on-education-insights-education-at-a-glance-2020.pdf.

[40] Selim, M., Aidrous, I., & Semenova, E. (2020). International tourism: Prospects for development in the post coronavirus world (egyptian example). InternationalJournalofManagement(IJM),11(7).doi:10.34218/IJM.11.7.2020.102

[41] Sigala, M. (2020). Tourism and COVID-19: Impacts and implications for advancing and resetting industry and research. Journal of business research, 117, 312-321.

[42] SIS.(2016).RedSeaGovernorate.RetrievedfromStateInformationService:https://www.sis.gov.eg/Story/68578/Red-Sea-Governorate?lang=en-us

[43] Talwar,M.,Talwar,S.,Kaur,P.,Tripathy,N.,&Dhir,A.(2021).Hasfinancialattitudeimpactedthetradingactivityofretailinvestorsduringthe COVID-19pandemic?. JournalofRetailingandConsumerServices,58,102341.

[44] TheEgyptianJuniorBusinessAssociation.(2020).MajorChallengesFacingBusinessesinEgypeinLightofCovid-19Crisis.CenterforInternationalPrivateEnterprise.Retrievedfromhttps://cipe-arabia.org/wp-content/uploads/2020/06/EJB_2020_Challenges_of_business_and_COVID_EN.pdf

[45] UNICEF. (2020). Covid-19 in Egypt Protecting Children and Young People in a Time of Crisis. Retrieved fromhttps://www.unicef.org/egypt/media/5831/file/COVID19%20Data%20Snapshot%20EN.pdf

[46] Usman,M.,Ali,Y.,Riaz,A.,&Zubair,A.(2020).Economicperspectiveofcoronavirus(COVID-19).Journalofpublicaffairs,20(4),e2252.doi:10.1002/pa.2252

[47] VanEck,E.,VanMelik,R.,&Schapendonk,J.(2020).MarketplacesasPublicSpacesinTimesofTheCovid-19Coronavirus Outbreak:FirstReflections.Tijdschriftvooreconomischeensocialegeografie,111(3),373-386.doi:10.1111/tesg.12431

[48] Wagdi, O., & Hasaneen, A. (2019). Obstacles and success factors for entrepreneurship: a comparative analysis between Egypt and Nigeria. Entrepreneurship and Sustainability Issues, 7 (2), 962-976.https://doi.org/10.9770/jesi.2019.7.2(12)

[49] WHO. (2021, February 4). Coronavirus disease (COVID-19) pandemic. Retrieved from World Health Organization (WHO):https://www.who.int/emergencies/diseases/novel-coronavirus-2019

[50] Zhu,X.,&Liu,J.(2020).EducationinandafterCovid-19:Immediateresponsesandlong-termvisions.PostdigitalScienceandEducation,2(3),695-699.

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 10392 - 10406
Received 05 March 2021; Accepted 01 April 2021.

Appendix(A):Tables

Table (1): Pearson Correlation output for the correlation between workplaces mobility rates and residential mobility rates under covid-19pandemicin Egypt

Correlations

		RESIDENT	WORKPLAC
Pearson Correlation	RESIDENT	1.000	-.879**
	WORKPLAC	-.879**	1.000
Sig. (2-tailed)	RESIDENT	.	.000
	WORKPLAC	.000	.
N	RESIDENT	340	340
	WORKPLAC	340	340

**. Correlation is signif icantat the 0.01 lev el(2-tailed).

Source:StatisticalPackagefortheSocialSciencesoutput.

Table(2)Regressionanalysisforworkplacesmobilityratesandresidentialmobilityratesundercovid-19pandemicinEgypt

ModelSummary

Model	R	RSquare	Adjusted RSquare	Std.Error oftheEsti mate
1	.879[a]	.772	.771	2.6456

a.Predictors:(Constant),WORKPLAC

ANOVA[b]

Model		SumofS quares	df	Mean Square	F	Sig.
1	Regression	8007.549	1	8007.549	1144.043	.000[a]
	Residual	2365.778	338	6.999		
	Total	10373.326	339			

a. Predictors:(Constant),WORKPLAC

b. DependentVariable:RESIDENT

Coefficients[a]

Model		Unstandardized Coefficients		Standardi zed Coefficien ts	t	Sig.
		B	Std.Error	Beta		
1	(Constant)	1.968	.202		9.732	.000
	WORKPLAC	-.319	.009	-.879	-33.824	.000

a.Dependent Variable:RESIDENT

Source:StatisticalPackagefortheSocialSciencesoutput.

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 10392 - 10406
Received 05 March 2021; Accepted 01 April 2021.

Table(3):FriedmantestoutputforthesymmetryWorkplacesmobilityratesundercovid-19pandemicintheEgyptiangovernorates

Ranks

	Mean Rank
ALEXANDR	11.75
ASSIUT	14.21
QALYUBIA	13.21
SHARQIA	19.33
ASWAN	9.71
BEHEIRA	24.92
BENISUEF	15.54
CAIRO	3.75
DAKAHLIA	10.17
DAMIETTA	10.17
FAIYUM	21.33
GHARBIA	14.54
GIZA	7.58
ISMAILIA	10.83
KAFRELSH	22.88
LUXOR	12.58
MATROUH	24.71
MENIA	20.21
MENOFIA	16.17
NEW_VALL	21.33
NORTH_SI	18.92
PORT_SAI	7.50
QENA	15.83
REDSEA_	1.67
SOHAG	13.04
SOUTH_SI	4.25
SUEZ	11.88

TestStatistics[a]

N	12
Chi-Square	196.011
df	26
Asymp.Sig.	.000

a.FriedmanTest

Source:StatisticalPackagefortheSocialSciencesoutput.

Table(4):Friedmantestoutputforthesymmetryaspectsoflifestyleundercovid-19pandemicinEgypt

Ranks

	Mean Rank
GROCERYP	5.48
PARKS	3.77
RESIDENT	4.77
RETAIL	1.28
TRANSITS	2.49
WORKPLAC	3.20

TestStatistics[a]

N	339
Chi-Square	1135.274
df	5
Asymp.Sig.	.000

a.FriedmanTest

Source:StatisticalPackagefortheSocialSciencesoutput.

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 10392 - 10406
Received 05 March 2021; Accepted 01 April 2021.

Table(5):PaneldataoutputforWorkplacesmobilityratesundercovid-19pandemicaccordingtobusinessactivitiestypes

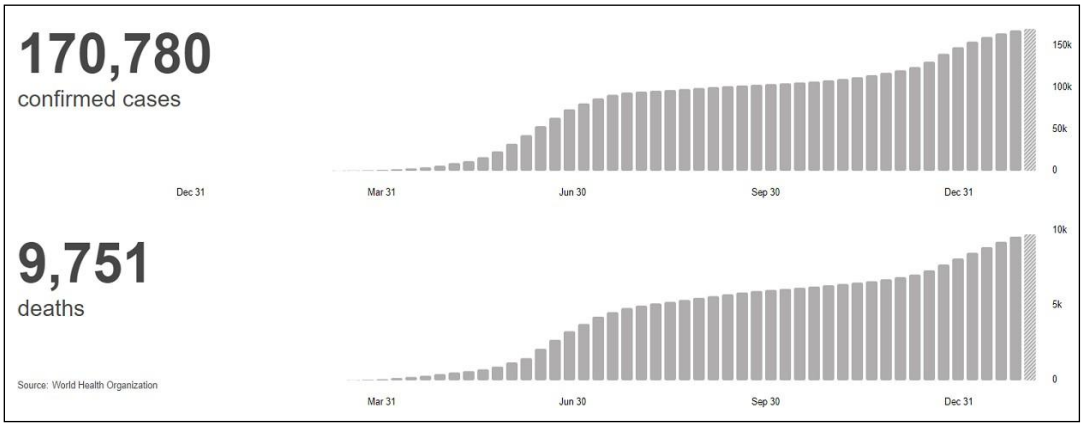
Model7:Random-effects(GLS),using324observationsIncluded12cross-sectionalunits
Time-series length = 27Dependent variable: WPRRobust(HAC)standarderrors

	Coefficient	*Std.Error*	*z*	*p-value*	
const	−10.1203	3.60808	−2.805	0.0050	***
X1	3.65997	2.53714	1.443	0.1491	
X2	−0.0823954	2.36078	−0.03490	0.9722	
X3	−3.64184	1.33250	−2.733	0.0063	***
X4	2.08329	3.09671	0.6727	0.5011	
X5	−10.4790	4.38313	−2.391	0.0168	**
X6	3.50197	4.54869	0.7699	0.4414	
Meandependentvar	−11.24074		S.D.dependentvar		12.75287
Sumsquaredresid	46878.32		S.E.ofregression		12.14150
Log-likelihood	−1265.616		Akaikecriterion		2545.232
Schwarzcriterion	2571.697		Hannan-Quinn		2555.795
rho	0.450458		Durbin-Watson		1.053781

'Between'variance=8.29359'
Within'variance=138.053
thetausedforquasi-demeaning=0.382438Jointtest on namedregressors-
Asymptoticteststatistic:Chi-square(6)=49.5943withp-value=5.66894e-009

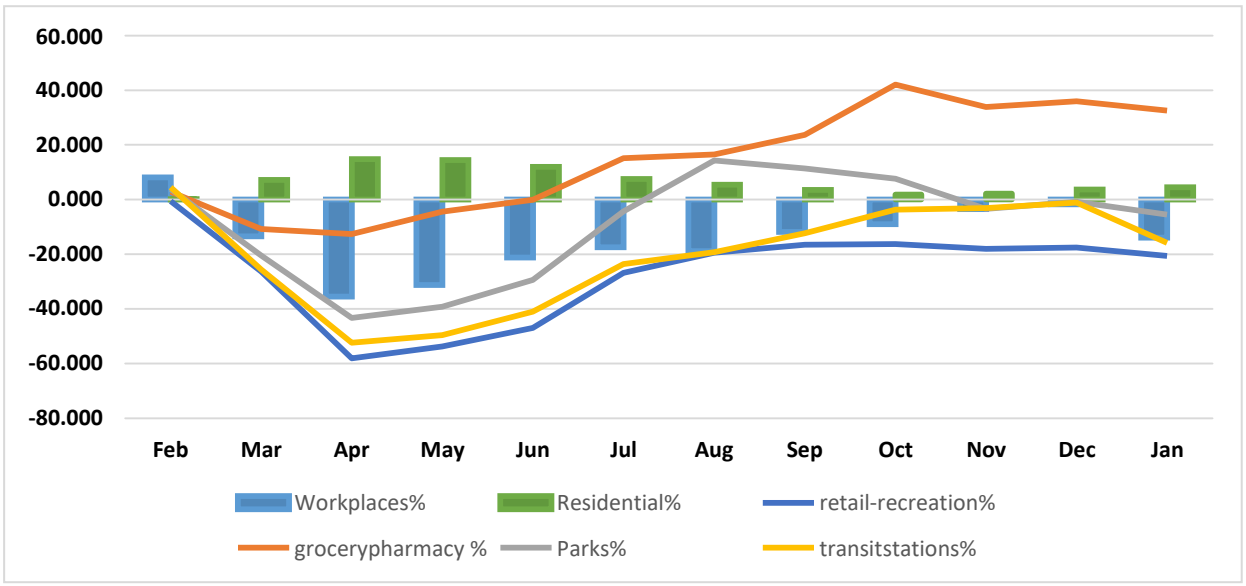
Breusch-Pagantest-
Nullhypothesis:Varianceofthe unit-specificerror=0Asymptoticteststatistic:Chi-square(1)=5.26244withp-value=0.0217905
Hausmantest-
Null hypothesis: GLS estimates are consistentAsymptoticteststatistic:Chi-square(6)=58.4021withp-value=9.49797e-011
Source:GnuRegression,EconometricsandTime-seriesLibraryoutput.

Appendix(B):Figures



Source:WorldHealthOrganization(WHO),Retrievedon10thFebruary2021Figure No. (1)Egypt Situation:Confirmed Casesand Deaths

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 10392 - 10406
Received 05 March 2021; Accepted 01 April 2021.



FigureNo.(2)MonthlyAverageIndicesinEgyptfromFebruary15,2020toJanuary19,2021

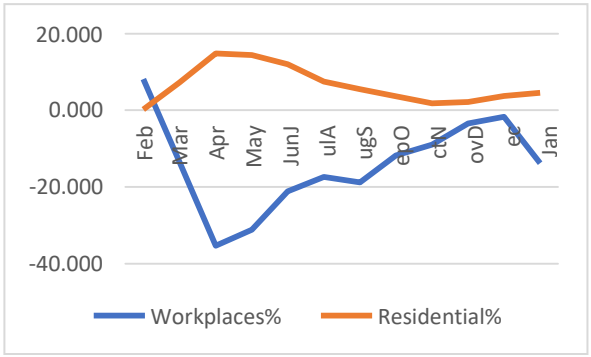


Figure No. (3) Monthly Average Workplaces Mobility & ResidentialMobilityinEgypt

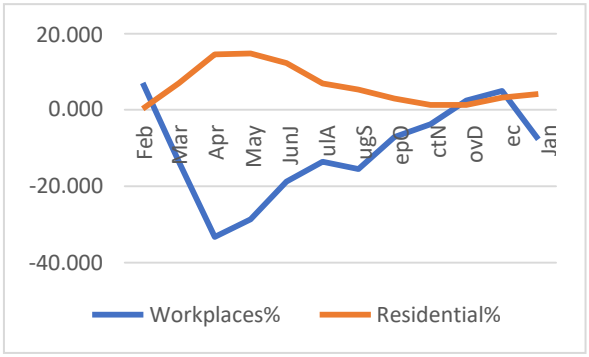


Figure No. (4)MonthlyAverageWorkplacesMobility& ResidentialMobilityinQalyubiaGovernorate

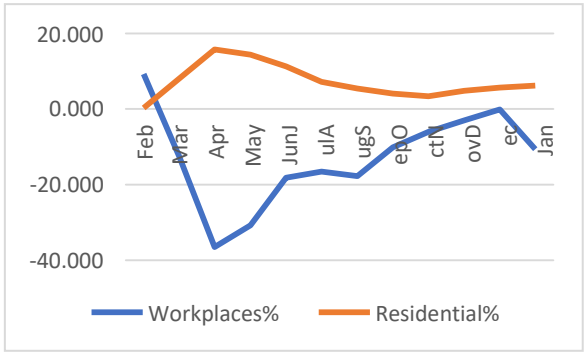


Figure No. (5) Monthly Average Workplaces Mobility & ResidentialMobilityinAlexandriaGovernorate

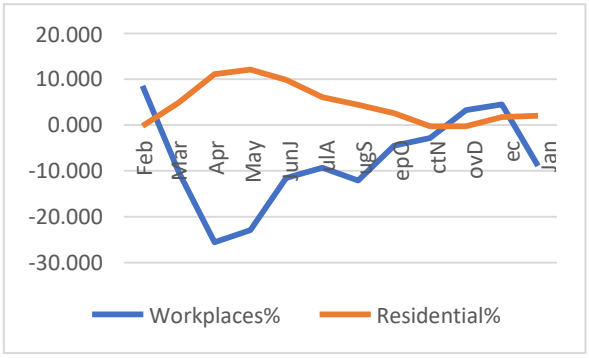


Figure No. (6) Monthly Average Workplaces Mobility & ResidentialMobilityinAsh SharqiaGovernorate

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 10392 - 10406
Received 05 March 2021; Accepted 01 April 2021.

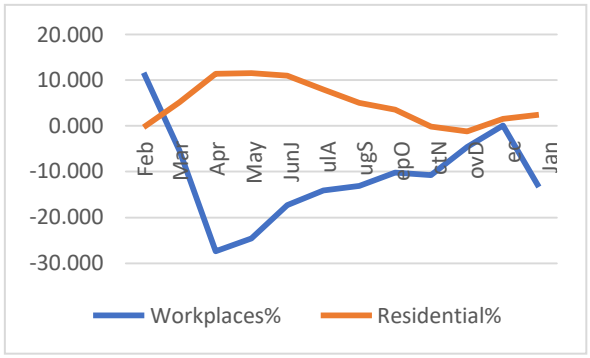


Figure No. (7) Monthly Average Workplaces Mobility & ResidentialMobilityinAssiutGovernorate

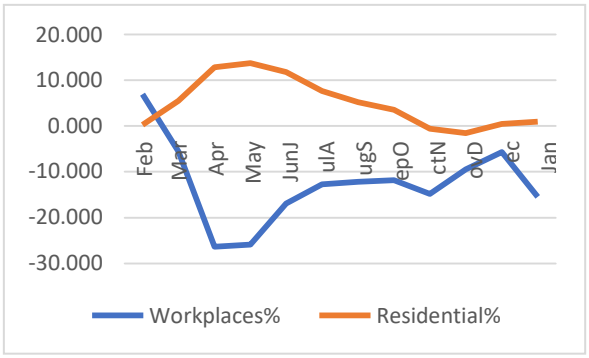


Figure No. (8) Monthly Average Workplaces Mobility & ResidentialMobilityinAswanGovernorate

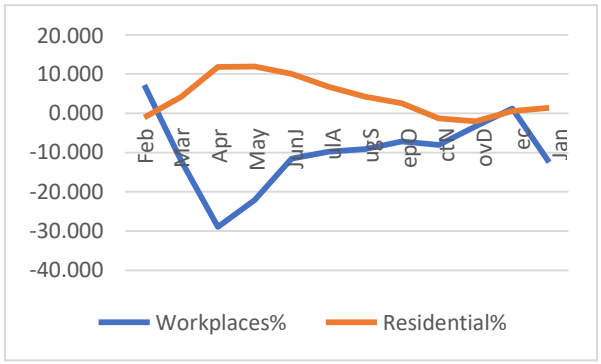
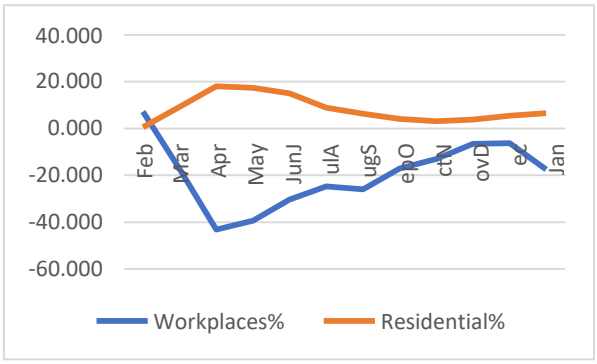
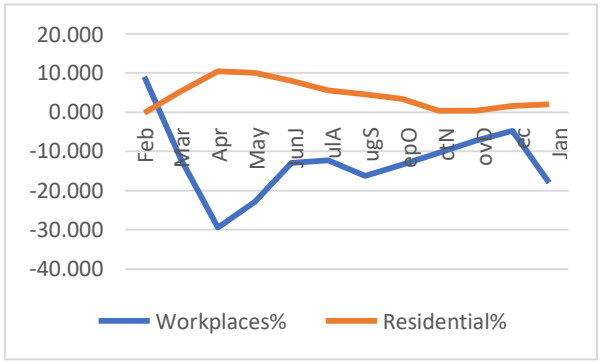


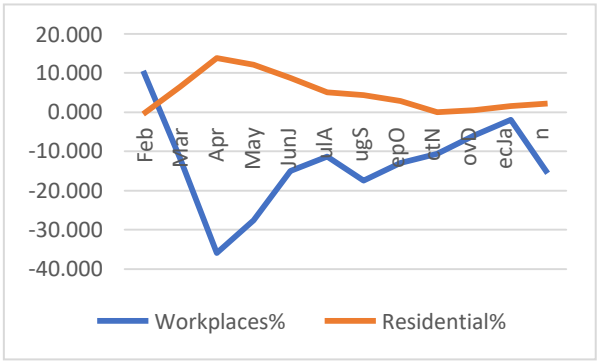
Figure No. (9) Monthly Average Workplaces Mobility & ResidentialMobilityinBeniSuefGovernorate



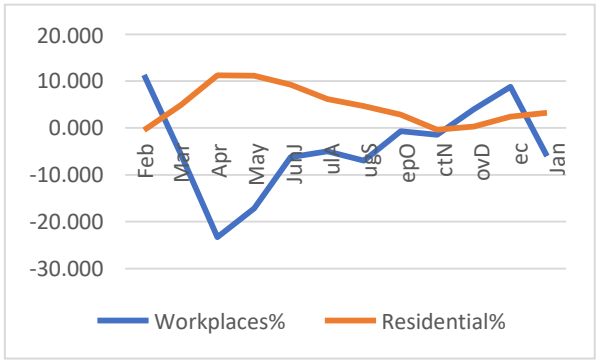
FigureNo.(10)MonthlyAverageWorkplacesMobility&ResidentialMobilityinCairoGovernorate



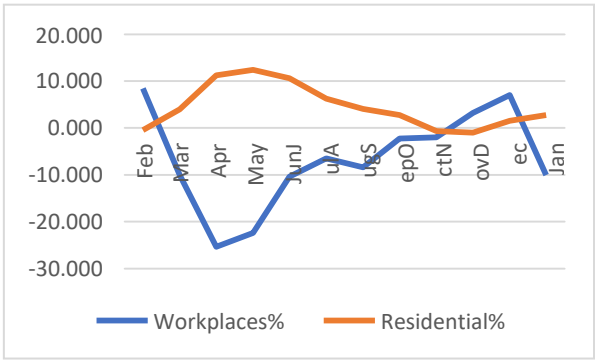
FigureNo.(11)MonthlyAverageWorkplacesMobility&ResidentialMobilityinDakahliaGovernorate



FigureNo.(12)MonthlyAverageWorkplacesMobility&ResidentialMobilityinDamiettaGovernorate

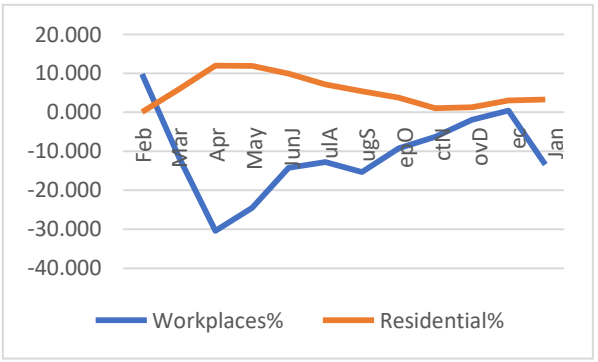


FigureNo.(14)MonthlyAverageWorkplacesMobility&ResidentialMobilityinElBeheira Governorate

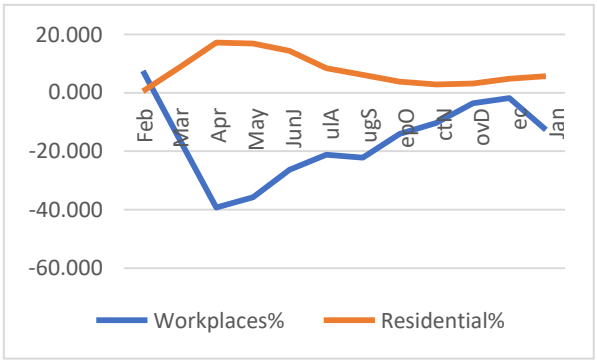


FigureNo.(15)MonthlyAverageWorkplacesMobility&ResidentialMobilityinFaiyum Governorate

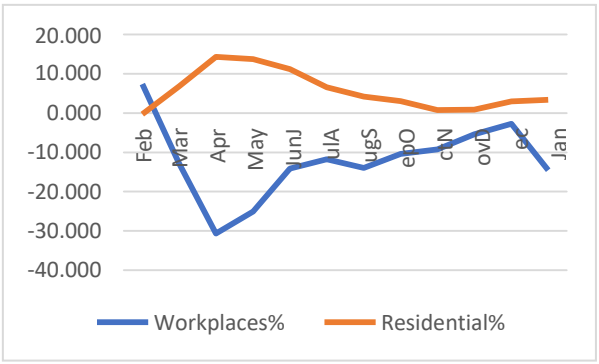
Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 10392 - 10406
Received 05 March 2021; Accepted 01 April 2021.



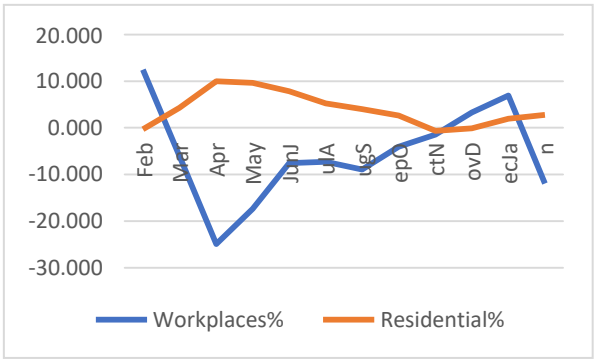
FigureNo.(16)MonthlyAverageWorkplacesMobility&ResidentialMobilityinGharbiaGovernorate



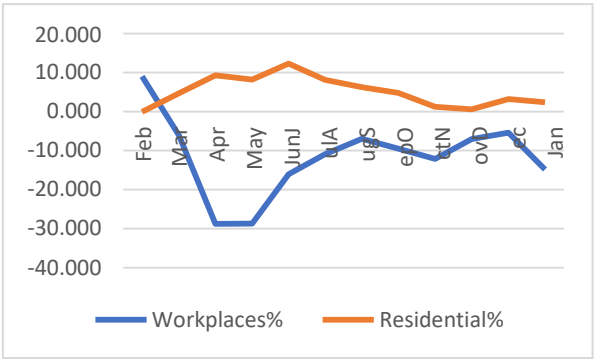
FigureNo.(17)MonthlyAverageWorkplacesMobility&ResidentialMobilityinGizaGovernorate



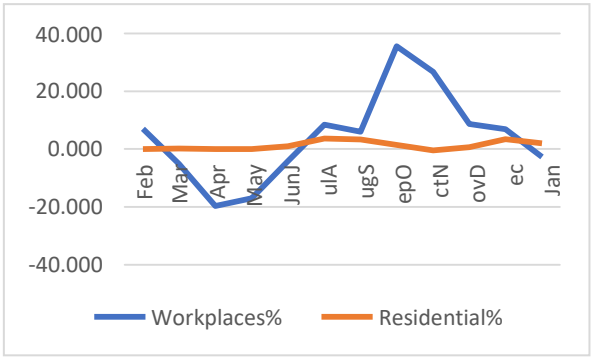
FigureNo.(18)MonthlyAverageWorkplacesMobility&ResidentialMobilityinIsmailiaGovernorate



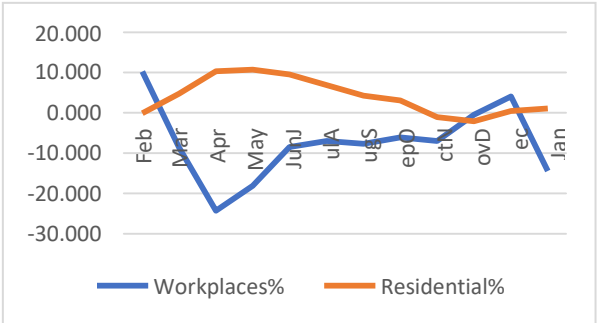
FigureNo.(19)MonthlyAverageWorkplacesMobility&ResidentialMobilityinKafr ElSheikh Governorate



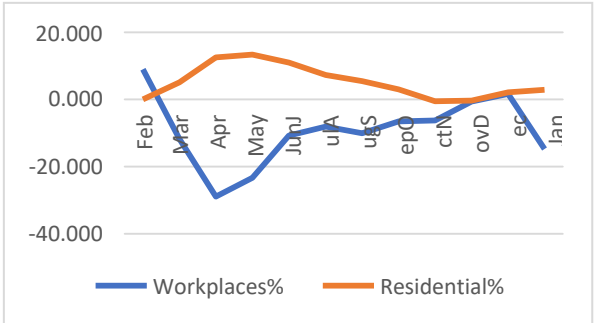
FigureNo.(20)MonthlyAverageWorkplacesMobility&ResidentialMobilityinLuxorGovernorate



FigureNo.(21)MonthlyAverageWorkplacesMobility&ResidentialMobilityinMatrouhGovernorate



FigureNo.(22)MonthlyAverageWorkplacesMobility&ResidentialMobilityinMeniaGovernorate

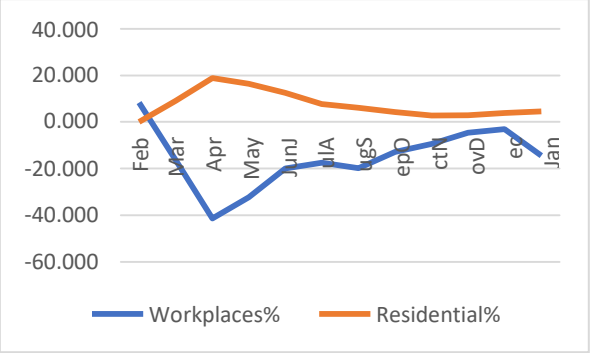


FigureNo.(23)MonthlyAverageWorkplacesMobility&ResidentialMobilityinMeniaGovernorate

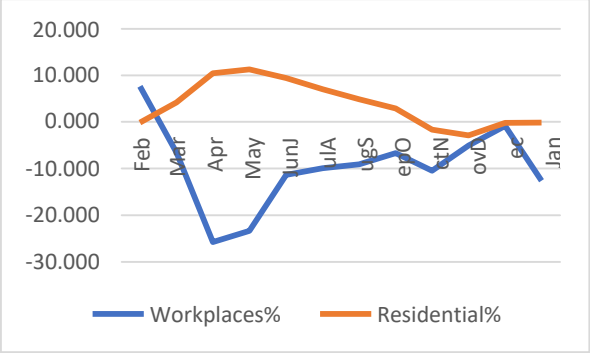
Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 10392 - 10406
Received 05 March 2021; Accepted 01 April 2021.

FigureNo.(24)MonthlyAverageWorkplacesMobility&ResidentialMobilityinNewValleyGovernorate

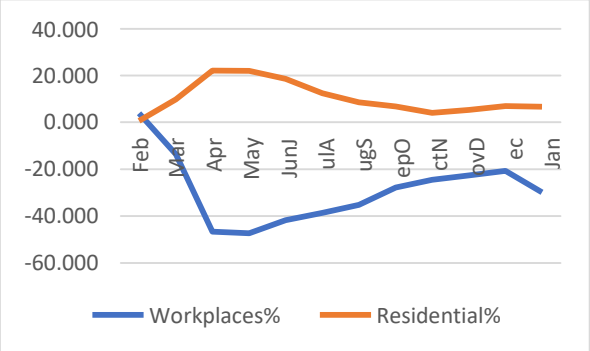
FigureNo.(25)MonthlyAverageWorkplacesMobility&ResidentialMobilityinNorthSinai Governorate



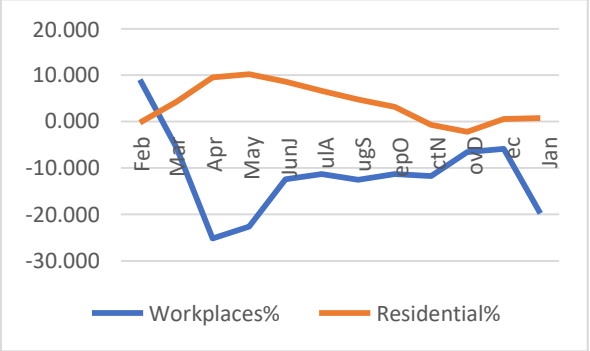
FigureNo.(26)MonthlyAverageWorkplacesMobility&ResidentialMobilityinPortSaidGovernorate



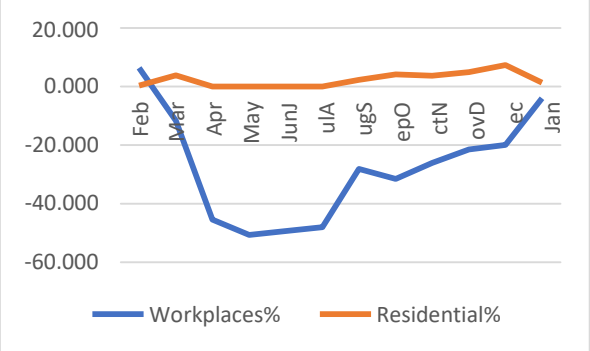
FigureNo.(27)MonthlyAverageWorkplacesMobility&ResidentialMobilityinQena Governorate



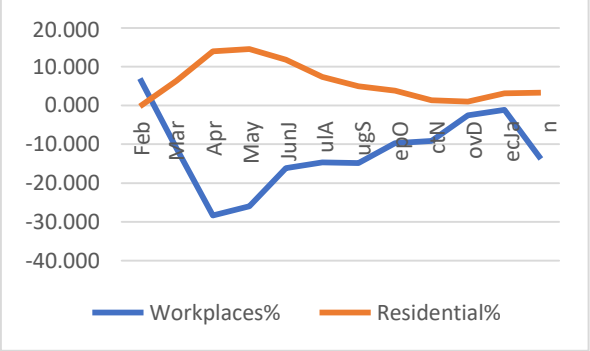
FigureNo.(28)MonthlyAverageWorkplacesMobility&ResidentialMobilityinRedSeaGovernorate



FigureNo.(29)MonthlyAverageWorkplacesMobility&ResidentialMobilityinSohagGovernorate

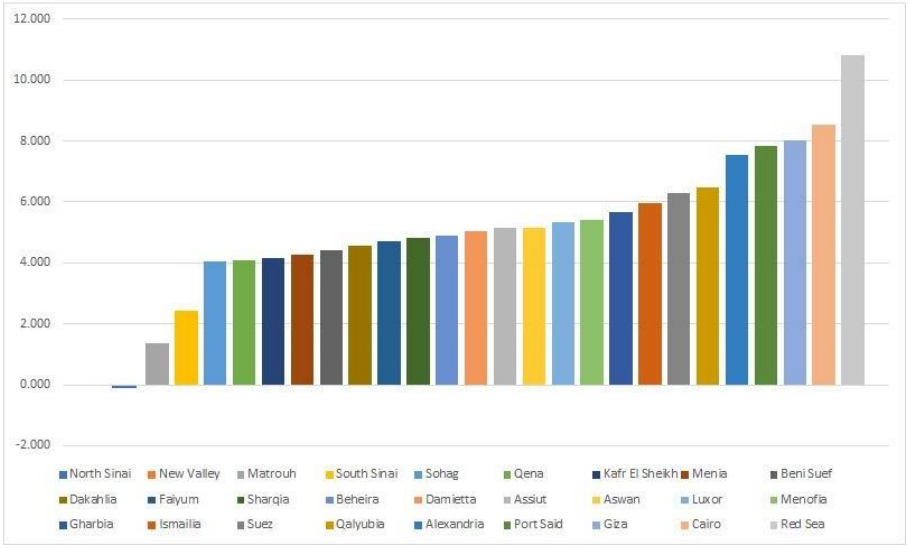


FigureNo.(30)MonthlyAverageWorkplacesMobility&ResidentialMobilityinSouthSinaiGovernorate

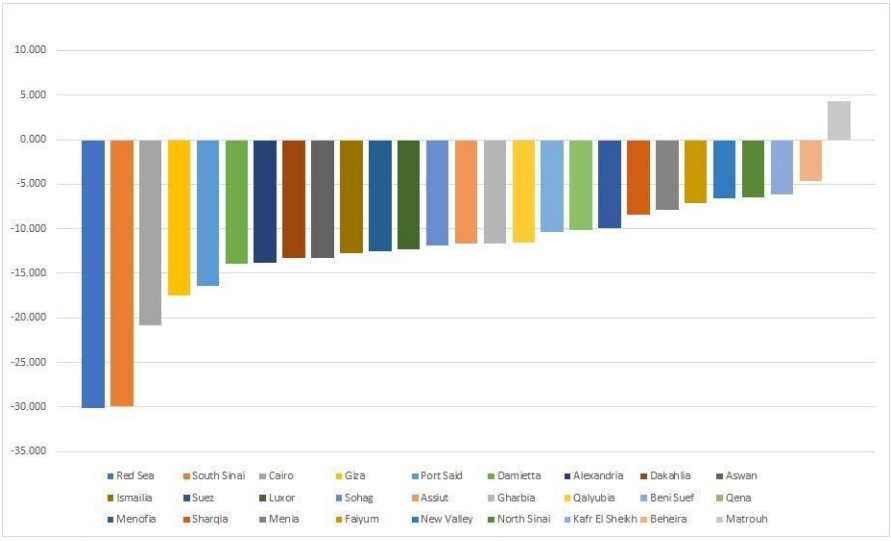


FigureNo.(31)MonthlyAverageWorkplacesMobility&ResidentialMobilityinSuezGovernorate

Annals of R.S.C.B., ISSN:1583-6258, Vol. 25, Issue 4, 2021, Pages. 10392 - 10406
Received 05 March 2021; Accepted 01 April 2021.



FigureNo.(32)AverageofResidentialMobilityintheEgyptianGovernoratesfromFebruary15,2020toJanuary19,2021



FigureNo.(33)AverageofWorkplacesMobilityintheEgyptianGovernoratesfromFebruary15,2020toJanuary19,2021