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Slobodan N. Aćimović\*

Veljko M. Mijušković\*\*

Ljiljan Veselinović\*\*\*

Ana Todorović Spasenić\*\*\*\*

# Poremećaji u globalnim lancima snabdevanja kao posledica aktuelnih privredno-političkih dešavanja

## Disruptions within global supply chains as a consequence of current economic and political events

### *Rezime*

Pandemija COVID-19 i rat u Ukrajini doveli su do jedne od najvećih recesija u novijoj globalnoj ekonomskoj istoriji. Kriza je pogodila sve segmente ekonomske aktivnosti na globalnom nivou, što se direktno odrazilo na poslovanje međunarodno orijentisanih preduzeća. Pravi je izazov minimizirati gubitke u domenu upravljanja lancima snabdevanja u nikad neizvesnjim uslovima na tržištu, koji su, nakon pandemije, dodatno pogoršani aktuelnim ratom u Ukrajini. Predmet analize u radu jeste razmatranje aktuelnih disruptacija u globalnim lancima snabdevanja, nastalih na bazi kašnjenja isporuke strateških sirovina mnogih preduzeća, što se direktno odrazilo na nepoštovanje rokova proizvodnje, a samim tim i isporuke proizvoda kupcima. Ovo je, pored problema sa obezbeđenjem sredstava za finansiranje berzanske robe i nikad veće energetske krize, problem sa kojim se suočavaju sva preduzeća u segmentu prerađivačke industrije, što se direktno odražava na kooperativnost na relaciji preduzeće dobavljač – preduzeće proizvodač – preduzeće kupac. Analiza se, takođe, bavi i aktuelnim ratom u Ukrajini, za koji se očekuje da još više poveća gubitke država i međunarodno orijentisanih preduzeća, uz davanje prognoza za dugi oporavak svetske privrede koji sledi.

**Ključne reči:** pandemija COVID-19, rat u Ukrajini, recesija, međunarodno orijentisana preduzeća, globalni lanci snabdevanja.

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### *Abstract*

The Covid-19 pandemic and the war in Ukraine led to one of the biggest recessions in the recent global economic history. The crisis has affected all segments of economic activity at the global level, which has directly affected the business of internationally oriented companies. The real challenge is to minimize losses in the field of supply chain management in ever more uncertain market conditions, which, after the pandemic, were further aggravated by the current war in Ukraine. The subject of analysis within the paper is the delay in the delivery of strategic raw materials to many companies, which directly affected the non-compliance with production deadlines, and thus the delivery of products to customers. This is, in addition to the problem of securing funds for financing commodities and the huge energy crisis, a problem faced by all companies in the manufacturing segment, which directly affects the cooperation between company supplier - company producer - company buyer. The paper analysis also deals with the current war in Ukraine which is expected to further increase the losses of states and internationally oriented companies, with giving forecasts of a long recovery of the global economy, following after.

**Keywords:** Covid-19 pandemic, war in Ukraine, recession, internationally oriented companies, global supply chains.

\* Ekonomski fakultet Univerziteta u Beogradu  
 \*\* Ekonomski fakultet Univerziteta u Beogradu, e-mail: veljko.mijuškovic@ekof.bg.ac.rs  
 \*\*\* Ekonomski fakultet Univerziteta u Sarajevu  
 \*\*\*\* „Prvi partizan“ a.d. Užice

## UVOD

Svet se suočio sa jednom od najvećih ekonomskega recesija u istoriji u poslednje dve godine. Pandemija COVID-19 i političke okolnosti izazvane ratom u Ukrajini dovele su do ozbiljnih poremećaja u globalnim lancima snabdevanja. Skok cena sirovina, rast troškova transporta, kašnjenja u isporuci sirovina / gotovih proizvoda i energetska kriza obeležili su poslovanje proizvodnih preduzeća u periodu 2021–2022. Aktuelne ekonomske i političke prilike najviše su uticale na upravljanje lancem snabdevanja evropskih kompanija čije je poslovanje vezano za LME berzu, a koje uvoze neke od strateških sirovina iz Ukrajine i Rusije ili izvoze proizvode u te zemlje. Za ovu vrstu preduzeća postalo je pravi izazov upravljati svim tokovima lanca snabdevanja kako bi se minimizirali gubici i sprečila kašnjenja u snabdevanju/proizvodnji/prodaji. Kraj aktuelnim dešavanjima još se ne nazire, cene i troškovi rasta, potražnja u preradivačkoj industriji raste i predviđa se da će efikasno i efektivno upravljanje svim tokovima u lancu snabdevanja biti ključ opstanka i uspeha ove grupe kompanija tokom perioda oporavka. Pravi izazov u današnjim uslovima jeste pokriti cenu koštanja, blagovremeno realizovati porudžbine kupaca i diferencirati se u odnosu na konkureniju.

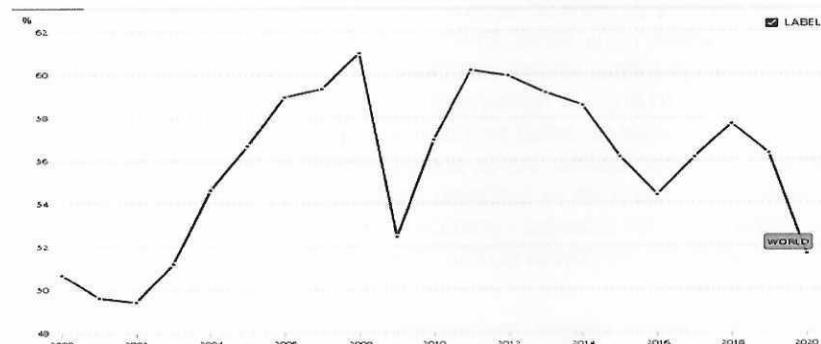
## 1. UTICAJ PANDEMIJE COVID-19 NA GLOBALNU TRGOVINU

Pandemija COVID-19 zahvatila je sve sfere života na globalnom nivou, uključujući i ekonomsku. Došlo je do usporavanja, čak i zaustavljanja privrednog rasta i razvoja zemalja širom sveta. Paralelno sa širenjem pandemije na globalnom nivou, došlo je do drastičnog

pada međunarodne trgovine. Na samom početku 2020. godine, učešće međunarodne trgovine u BDP-u svih zemalja u proseku je palo sa 56% na 52% (Svetska banka, 2020). Kina, kao izvor pandemije, prva se suočila sa posledicama, a s obzirom na to da ima status jednog od najvećih svetskih uvoznika i izvoznika, uticala je na globalnu ekonomiju i trgovinu svih ostalih zemalja (slika 2). Sa širenjem pandemije na druge kontinente, došlo je do zastoja u globalnoj trgovini robom i uslugama. Globalno tržište usluga, posebno turizam, mnogo je teže pogodeno od globalnog tržišta roba (slika 3). Logistička industrija, kao jedan od ključnih partnera svih sektora privrede, trpela je velike gubitke uporedo sa usporavanjem globalne trgovine. Došlo je do usporavanja privrednog rasta u svim zemljama sveta (Barua, 2020; Carreño et al., 2020), što je direktno uticalo na usporavanje rasta i razvoja globalne logističke industrije (ESCAP, 2020; IFC, 2020; Gonzales, 2020; Loske, 2020; Liu et al., 2020; Nikolopoulos, 2020; Goel et al., 2021; Notteboom, 2021; Oienuga, 2021), što je posledica sledećeg:

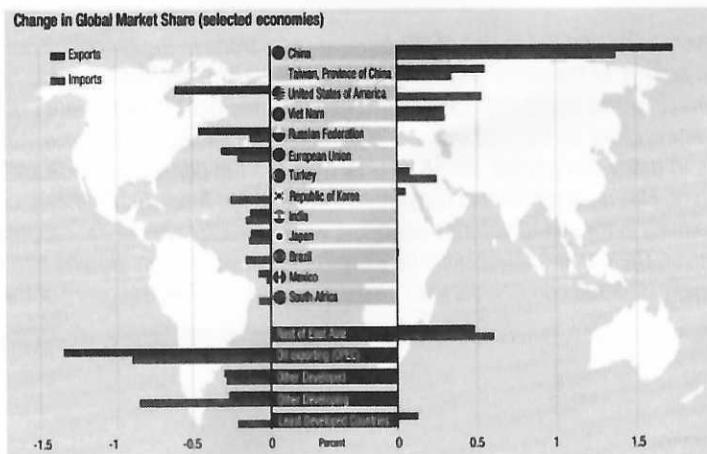
- smanjenje obima svih vrsta teretnog saobraćaja (drumskog, vodenog, železničkog i vazdušnog);
- negativan uticaj na blagovremenost isporuka zbog kašnjenja na granici i procedura testiranja;
- usporavanje sprovođenja postupka carinjenja;
- poremećaji i blokade u lancu snabdevanja utiču na likvidnost logističkih kompanija;
- smanjenje outsourcinga upravljanja lancem snabdevanja zbog ušteda u kriznim uslovima smanjuje angažovanje pružalaca logističkih usluga;
- ulaganja u unapređenje transportne infrastrukture više nisu prioritet, što stvara dodatne probleme logističkoj industriji.

*Slika 1. Globalna trgovina (% GDP-a)*



Izvor: <https://data.worldbank.org/indicator>

*Slika 2. Uvoz i izvoz širom sveta tokom pandemije COVID-19 – period 2019–2021.*



Izvor: UNCTAD (2021)

## INTRODUCTION

The world has faced one of the biggest economic recessions in history in the last two years. The Covid-19 pandemic and the political circumstances, caused by the war in Ukraine, have led to serious disruptions in global supply chains. The jump in raw material prices, rising transport costs, delays in the delivery of raw materials/final products and the energy crisis marked the operations of manufacturing companies in the period 2021-2022. Current economic and political circumstances have had the greatest impact on the management of the supply chain of European companies whose business is related to the LME stock exchange, and which import some of the strategic raw materials from Ukraine and Russia or export products to them. For this type of company, it has become a real challenge to manage all supply chain flows in order to minimize losses and prevent delays in supply/production/sales. The end of current events is not yet in sight, prices and costs are rising, demand is growing in the processing industry and it is predicted that efficient and effective management of all flows in the supply chain will be key to survival and success of this category of companies until the crisis, during the recovery period from the same. The real challenge in today's conditions is to cover the price of chestnuts, timely realize customer orders and differentiate in relation to the competition.

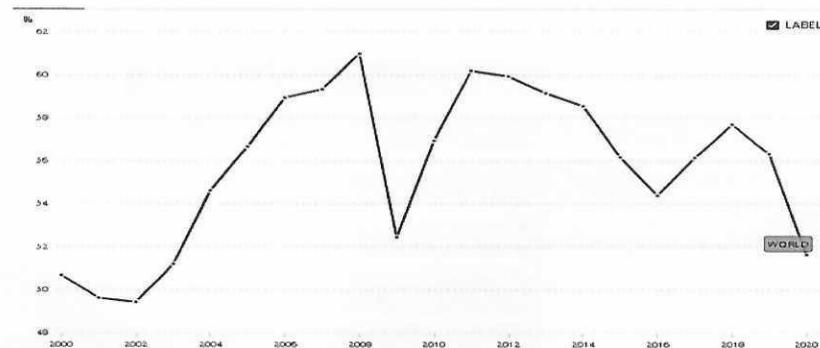
## 1. THE IMPACT OF THE COVID-19 PANDEMIC ON GLOBAL TRADE

The Covid-19 pandemic has affected all spheres of life globally, including the economic one. There has been a slowdown, even a halt, of economic growth and development of countries around the world. In parallel with the spread of the pandemic at the global level, there was a drastic decline in international trade. At the very beginning

of 2020, the share of international trade in the GDP of all countries fell on average from 56% to 52% (World Bank, 2020). China, as the source of the pandemic, was the first to face the consequences, and given its status as one of the world's largest importers and exporters, it affected the global economy and trade of all other countries (Figure 2). With the spread of the pandemic to other continents, there was a stalemate in the global trade of goods and services. The global market for services, especially tourism, has been hit much harder than the global commodity market (Figure 3). The logistics industry, as one of the key partners of all sectors of the economy, has suffered heavy losses in parallel with the decline in global trade. There has been a slowdown in economic growth in all countries of the world (Barua, 2020; Carreno et al., 2020), which has had a direct impact on the slowdown in growth and development of the global logistics industry (ESCAP, 2020); IFC, 2020; Gonzalez, 2020; Loske, 2020; Liu et al., 2020; Nikolopoulos, 2020; Goel et al., 2021; Notteboom, 2021; Oyenuga, 2021), which is a consequence of the following:

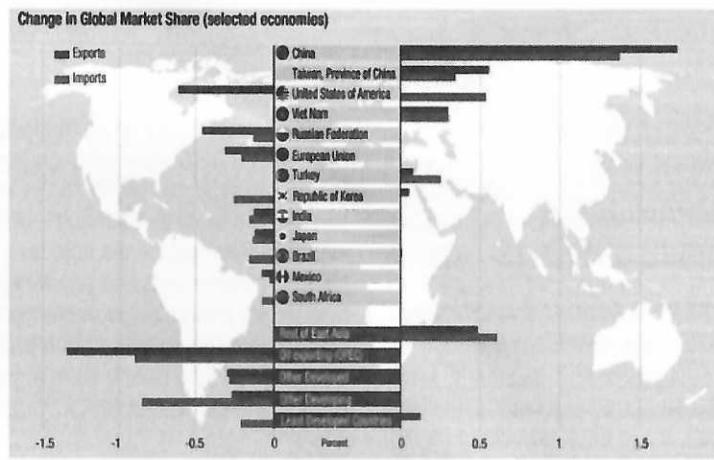
- reduction of the volume of all types of freight transport (road, water, train and air),
- negative impact on the timeliness of deliveries due to border delays and driver testing procedures,
- slowing down the implementation of the customs clearance procedure,
- supply chain disruptions and blockages affect the liquidity of logistics companies,
- reduction of supply chain management outsourcing due to savings in crisis conditions reduces the engagement of logistics providers,
- investments in the improvement of transport infrastructure are no longer a priority, which creates additional problems for the logistics industry.

**Figure 1. Global trade (% GDP)**

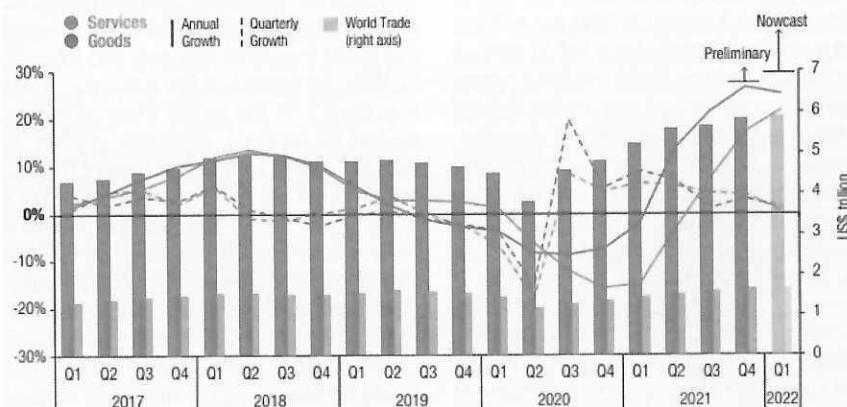


Source: <https://data.worldbank.org/indicator>

**Figure 2. Imports and exports globally during the Covid-19 pandemic - period 2019-2021.**



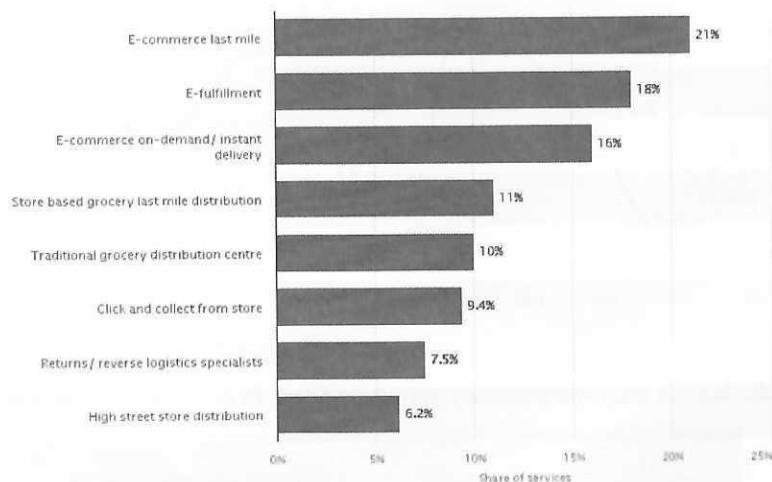
Source: UNCTAD (2021)

**Slika 3.** Proračuni UNCTAD-a – globalni trgovinski trendovi u periodu 2017–2022.

Izvor: UNCTAD (2022)

Tokom 2020. godine, najmanje gubitke imale su logističke kompanije koje sarađuju sa e-trgovcima. U prvoj godini pandemije, e-trgovina zabeležila je značajan rast u svim domenima (Beckers et al., 2021; Guthrie, Fosso-Vamba & Arnaud, 2021), a e-trgovina distribuirala je robu širom sveta u saradnji sa logističkim kompanijama (Ataiah et al., 2021; Perkumiene et al., 2021). Tokom završnog perioda, logističke i transportne kompanije ostvarile su najveći profit od e-trgovine. U drugoj polovini 2020. godine počinje postepeni oporavak globalne privrede, koji se odvijao uporedo sa ulaskom zemalja u borbu protiv pandemije. Globalno tržište roba počelo je s blagim oporavkom u poslednjem kvartalu 2020. godine (slika 3), dok je blagi oporavak globalnog logističkog tržišta usluga počeo tek u drugom kvartalu 2021. godine (UNCTAD, 2022). Ubrzani oporavak globalne trgovine počeo je 2021. godine, što je rezultiralo vrednošću od 28,5

biliona dolara na kraju 2021. godine, što je povećanje od 25% u odnosu na 2020. godinu i 13% u odnosu na 2019. godinu (UNCTAD, 2022). Povećana je tražnja u većini proizvodnih industrija, što je rezultiralo povećanjem obima trgovine, a samim tim i oporavkom logističke industrije. Veličina globalnog logističkog tržišta dostigla je vrednost od skoro 9.525,1 milijardi USD u 2021. godini. Očekuje se da će logističko tržište rasti uz CAGR od 5,7% između 2022. i 2027. godine i doći vrednost od skoro 13.326,3 milijarde USD do 2027. godine (EMR, 2021). U periodu 2020–2021. potražnja za sledećim logističkim uslugama je najviše porasla (slika 4): „last mile“ e-trgovina, „priprema i dostava“ e-trgovina, „instant isporuka“ e-trgovina, „last mile“ distribucija namirnica, tradicionalni centar za distribuciju namirnica i „klikni i preuzmi“ iz prodavnice.

**Slika 4.** Potražnja za logističkim uslugama nakon krize COVID-19

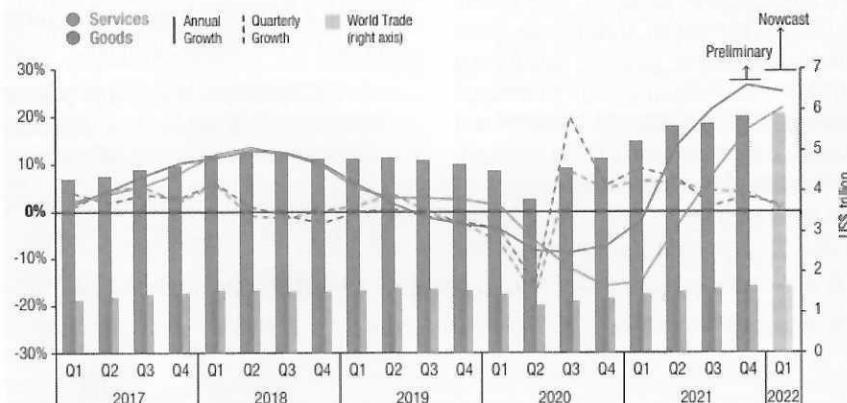
Izvor: STATISTA (2022)

## 2. KLJUČNI PROBLEMI UPRAVLJANJA LANCEM SNABDEVANJA U MEĐUNARODNO ORIJENTISANIM KOMPANIJAMA U USLOVIMA PANDEMIJE COVID-19

Prvu godinu pandemije COVID-19 obeležili su prvenstveno logistički i organizacioni problemi u oblasti upravljanja lancem snabdevanja globalnih kompanija. Kupovine i isporuke bilo je veoma teško realizovati na vreme, zbog čega su se kompanije često odlučivale za outsourcing logističkih aktivnosti, što je direktno uticalo na rast vrednosti globalnog 3PL tržišta. Veličina globalnog logističkog tržišta procenjena je na 956,80 milijardi dolara u 2021. godini i očekuje

se da će se povećati po kombinovanoj godišnjoj stopi rasta (CAGR) od 8,6% od 2022. do 2030. godine (Grand View Research, 2022). Odluka rukovodstva velikog broja kompanija u periodu 2020–2021. bila je da se uradi outsourcing logističkih aktivnosti i da se angažuju iste logističke kompanije koje su u 2020. godini naišle na već poznate probleme izazvane pandemijom COVID-19 u ovoj oblasti. Na ovaj način, međunarodno orientisane kompanije uložile su vreme i resurse za rešavanje internih problema, pre svega u oblasti otežane organizacije rada u svim organizacionim delovima, što je bilo uzrokovano sve većim brojem slučajeva zaraze virusom.

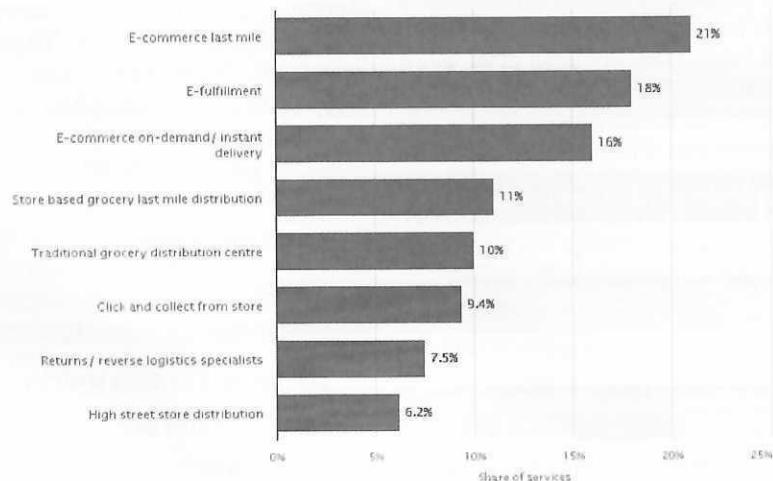
Početkom 2021. godine, logistički i organizacioni problemi više nije u fokusu top menadžmenta međunarodno orientisanih kom-

**Figure 3. UNCTAD calculations – global trade trends during period 2017-2022.**

Source: UNCTAD (2022)

During 2020, the smallest losses were incurred by logistics companies that cooperate with e-merchants. In the first year of the pandemic, e-commerce saw significant growth in all domains (Beckers, et al., 2021; Guthrie, Fosso-Wamba, & Arnaud, 2021), and e-commerce distributed goods around the world in cooperation with logistics companies. Atayah et al., 2021; Perkumiene et al, 2021). During the closing period, logistics and transport companies drew the highest profits from e-commerce. In the second half of 2020, the gradual recovery of global industry begins, which took place in parallel with the entry of countries in the fight against the pandemic. The global commodity market started with a slight recovery in the last quarter of 2020 (Figure 3), while a slight recovery of the global services market began only in the second quarter of 2021 (UNCTAD, 2022).

The accelerated recovery of global trade began in 2021, resulting in a value of USD 28.5 trillion at the end of 2021, up 25% from 2020 and 13% from 2019 (UNCTAD, 2022). Demand has increased in most manufacturing industries, which resulted in an increase in trade, and thus a recovery in the logistics industry. The global logistics market size reached a value of almost USD 9,525.1 billion in the year 2021. The logistics market is further expected to grow at a CAGR of 5.7% between 2022 and 2027 to reach a value of almost USD 13,326.3 billion by 2027 (EMR, 2021). In the period 2020-2021, the demand for the following logistics services increased the most (Figure 4): e-commerce last mile, e-commerce fulfillment, e-commerce instant delivery, stored based grocery last mile distribution, traditional grocery distribution center and click & collect from store.

**Figure 4. Logistics services in demand after the COVID-19 crisis**

Source: STATISTA (2022)

## 2. KEY PROBLEMS OF SUPPLY CHAIN MANAGEMENT OF INTERNATIONAL-ORIENTED COMPANIES IN CONDITIONS OF COVID-19 PANDEMIC

The first year of the Covid-19 pandemic was marked primarily by logistical and organizational problems in the field of supply chain management of global companies. It was very difficult to realize purchases and shipments on time, which is why companies increasingly decided to outsource logistics activities, which directly affected the growth of the value of the global 3PL market. The global third-party logistics market size was valued at USD 956.80 billion in 2021 and

is expected to expand at a compound annual growth rate (CAGR) of 8.6% from 2022 to 2030 (Grand View Research, 2022). The decision of the management of a large number of companies in the period 2020-2021 is to outsource logistics activities and the same trust to logistics companies that in 2020 ran into all the problems caused by the Covid-19 pandemic in this area. In this way, internationally oriented companies have freed up time and resources to solve internal problems, primarily in the field of difficult organization of work in all organizational parts, which is caused by the growing number of cases of virus infection.

At the start of 2021, the logistical and organizational problem is no longer the focus of top management of internationally oriented

panija. Globalne cene i opšte stanje na finansijskom tržištu bili su relativno stabilni u prvoj godini pandemije. Globalno tržište počelo je da se oporavlja početkom 2021. godine, ali su tek tada počele da se osećaju finansijske posledice pandemije. Došlo je do skoka cena svih sirovina u preradivačkoj industriji, posebno skoka cena berzanske robe. Bakar, cink, olovo i aluminijum dostigli su neke od rekordnih istorijskih vrednosti 2021. godine (slika 5). Menadžment lanca snabdevanja preradivačkih kompanija suočio se sa izazovom obezbeđivanja sredstava za finansiranje budućeg snabdevanja sirovinama. Rast cena sirovina direktno utiče na rast cene koštanja, što dovodi do skoka cena finalnih proizvoda kako bi se održala

likvidnost u poslovanju. Ključni faktori za uspostavljanje uspešnog upravljanja lancem snabdevanja u 2021. godini bili su:

- uspeh u finansiranju nabavke sirovina čije su cene stalno rasle (posebno berzanske sirovine);
- strateški pristup u definisanju prodajnih cena – rast cene koštanja mora biti praćen rastom prodajnih cena, ali ne sme biti drastičan da se ne bi izgubili kupci;
- strateški pristup u kreiranju tržišnih performansi i diferencijacije u odnosu na konkurenčiju u recesiji.

**Slika 5.** Skok cena metala na LME berzi u periodu 2020–2022, mereno rastom LME indeksa



Izvor: Trading Economics (2022)

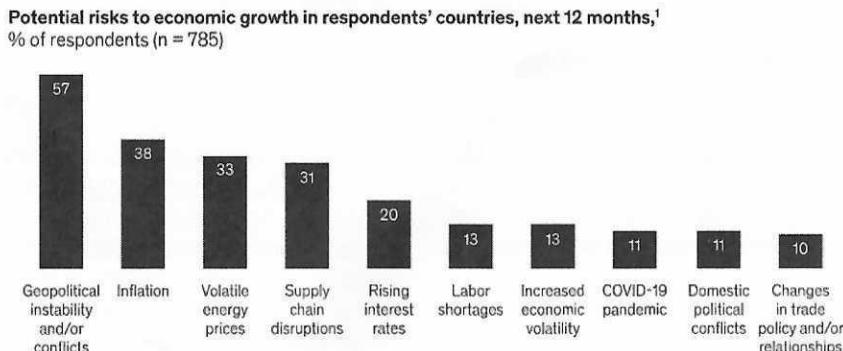
Pandemija COVID-19 dovela je do neviđenih pritisaka na lance snabdevanja. Logistički poremećaji, nestaćica poluprovodnika i rastuće cene energije dodatno su izazvali probleme u snabdevanju i povećanju troškova isporuke. Zbog toga, velike kompanije naročito su se fokusirale na pouzdanost i upravljanje rizicima u svojoj mreži snabdevanja, ali su kašnjenja i dalje prisutna (Richei et al., 2021; Dikon & Rimmer, 2022; UNCTAD, 2022). Posledice rata u Ukrajini usledile su nakon prethodno opisanog uticaja pandemije na upravljanje lancem snabdevanja međunarodno orijentisanih kompanija. U prvom kvartalu 2022. godine ukrstile su se posledice pandemije i rata, što je dovelo do velikih izazova i pretnji opstanku na tržištu. Ekonomski i politički uslovi dominantno određuju sve faktore opstanka međunarodno orijentisanih kompanija u 2022. godini.

### 3. UTICAJ GEOPOLITIČKIH SUKOBA NA TOKOVE U GLOBALNIM LANCIMA SNABDEVANJA

U prvom kvartalu 2022. godine, četiri dana nakon početka invazije na Ukrajinu, McKinsey je anketirao 785 ekonomskih i političkih stručnjaka kako bi identifikovao ključne krize u ekonomskom rastu i razvoju u 2022. godini. Geopolitički sukobi iskristalizali su se kao faktor koji će najviše ugroziti ekonomski prosperitet u 2022. godini. Pandemija COVID-19 gurnuta je na osmo mesto. Prema rezultatima studije, najveće pretnje globalnoj ekonomiji u 2022. godini jesu (slika 6):

- geopolitički sukobi;
- inflacija;
- energetska kriza, koja utiče na drastičan skok cena energenata;
- poremećaji u lancima snabdevanja i
- porast kamatnih stopa.

**Slika 6.** Najveće kočnice privrednog rasta i razvoja u 2022. godini



<sup>1</sup>Out of 18 risks that were presented as answer choices.

Izvor: McKinsey&Company (2022)

companies. Global prices and the general state of the financial market were relatively stable in the first year of the pandemic. The global market began to recover in early 2021, but the financial consequences of the pandemic only then began to be felt. There was a jump in the prices of all raw materials in the processing industries, especially a jump in the prices of stock exchange goods. Copper, zinc, lead and aluminum reached some of the record historical values in 2021 (Figure 5). The supply chain management of processing companies has faced the challenge of securing funding for advance financing of raw material supply. The growth of raw material prices directly affects the growth of chestnut prices, which imposes the need for a jump in the prices of final products in order

to ensure liquid business. The key predictors of establishing a successful supply chain management in 2021 were:

- Success in financing the supply of raw materials whose prices have been constantly rising (especially stock exchange-categorized raw materials) and
- Strategic approach in defining sales prices - the growth of the price of chestnuts must be accompanied by the growth of sales prices, but it must not be drastic so as not to lose customers.
- Strategic approach in creating market performance and differentiation in relation to competition in recession.

**Figure 5.** The jump in metal prices on the LME stock exchange in the period 2020-2022 - measured by the growth of the LME index.



Source: Trading Economics (2022)

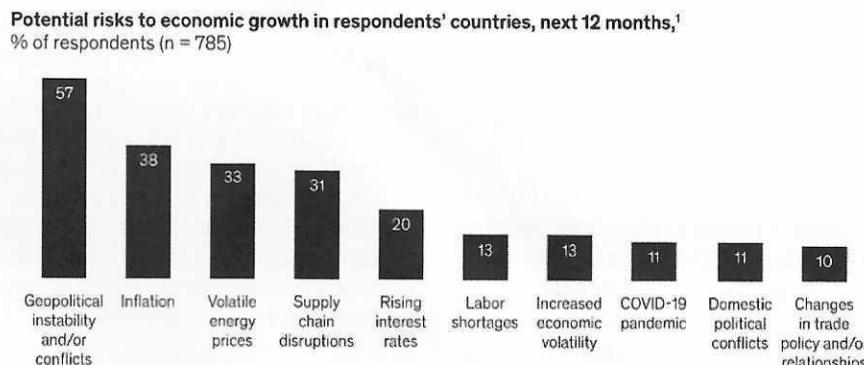
The COVID-19 pandemic resulted in unprecedented pressures on supply chains. Logistic disruptions, a semiconductor shortage and rising energy prices have further contributed to supply shortages and spiraling shipping costs. As a result, major companies have become strongly focused on improving reliability and managing risks for their supply networks, but delays have persisted nevertheless (Richey et al, 2021; Dixon & Rimmer, 2022; UNCTAD, 2022). The consequences of the war in Ukraine followed the previously described impact of the pandemic on the supply chain management of internationally oriented companies. In the first quarter of 2022, the consequences of the pandemic and the war crossed, which led to a drastic jump in challenges and threats to survival in the market. Economic and political conditions dominantly determine all the predictors of the survival of internationally oriented companies in 2022.

### 3. THE IMPACT OF GEOPOLITICAL CONFLICTS ON FLOWS IN GLOBAL SUPPLY CHAINS

In the first quarter of 2022, four days after the start of Ukraine's invasion, McKinsey surveyed 785 economic and political experts to identify key crises in economic growth and development in 2022. Geopolitical conflicts have crystallized as the factor that will most threaten economic prosperity in 2022. The Covid-19 pandemic was pushed to eighth place. The biggest threats to the global economy, according to the results of the study, in 2022 are (Figure 6):

- Geopolitical conflicts,
- Inflation,
- Energy crisis that affects the drastic jump in energy prices,
- Disruptions in supply chains and
- Jump in interest rates.

**Figure 6.** The biggest brakes on economic growth and development in 2022



<sup>1</sup>Out of 18 risks that were presented as answer choices.

Source: McKinsey&Company (2022)

Geopolitički sukobi, tačnije, rat u Ukrajini, izazvali su dodatne posledice pandemije COVID-19 (Ciuriak, 2022; Mbah & Vasum, 2022; Svetska banka, 2022). Inflacija, energetska kriza i poremećaji u globalnim lancima snabdevanja su zapravo najveće posledice ak-

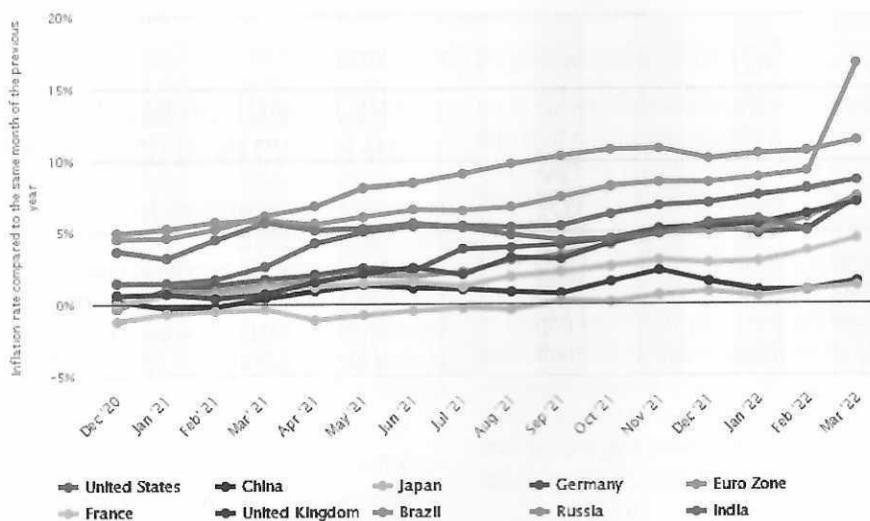
tuelnih geopolitičkih sukoba. Globalna ekonomska recesija najbolje se ogleda u rastu kamatnih stopa (slika 7) i stopama inflacije na globalnom nivou (slika 8), uz veoma visok nivo cena svih roba.

*Slika 7. Kretanje kamatnih stopa na globalnom nivou – mart 2022.*



Izvor: <https://advisor.visualcapitalist.com/mapped-interest-rates-by-country-in-2022/>

*Slika 8. Rast stope inflacije po zemljama u periodu decembar 2020 – mart 2022.*



Izvor: Statista (2022)

Cene sirovina na berzi ostale su na visokom nivou, a neke beleže dalji rast iznad nivoa iz 2021. godine. Finansiranje nabavki sirovina i prebacivanje rasta cena na kupce izazovi su sa kojima se suočava menadžment svih međunarodno orijentisainh kompanija. Geopolitički sukobi izazvali su dodatne probleme menadžmentu mnogih kompanija, kada je riječ o partnerima iz Rusije i Ukrajine, od kojih su najveći sledeći:

- kašnjenja u uvozu/izvozu na rusko tržište, nakon čega trgovina sa Rusijom potpuno prestaje – u periodu mart-april dolazi do kašnjenja u realizaciji isporuka, što dovodi do kašnjenja uvoza sirovina iz Rusije i Ukrajine, ali i izvoza gotovih proizvoda na ova tržišta, što direktno utiče na kašnjenje svih aktivnosti u lancu snabdevanja kompanija koje sarađuju sa ovim zemljama;
- drastično povećanje troškova transporta i otežano pronaalaženje transportnog preduzeća – paralelno sa uvođenjem niza sankcija

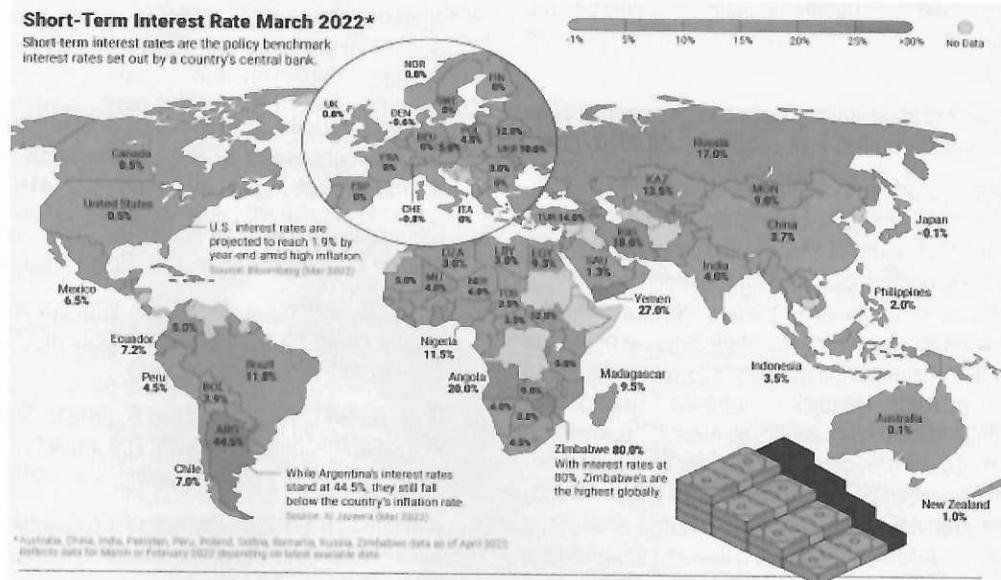
Rusiji, troškovi transporta rastu (zbog visokih cena goriva) i postaje pravi izazov pronaći transportno preduzeće sa pristupačnom cenom koje će realizovati transport, dok se sankcijama potpuno ne obustave mere uvoza/izvoza;

- složenije carinske procedure – srpske kompanije koje sarađuju sa ruskim tržištem u periodu mart-april suočile su se sa dodatnom papirologijom u realizaciji uvoza/izvoza – izjavama i dokumentacijom o krajnjem odredištu uvezene i izvezene robe. Pošto je Evropa paketom sankcija preduzela mere protiv ruskih vlasnika kapitala u Evropi, srpske kompanije suočile su se i sa problemom uvoza/izvoza već naručene robe iz evropskih kompanija čiji je vlasnik ili jedan od vlasnika Rus;
- gubitak cenovno konkurentnih dobavljača strateških sirovina iz Rusije drastično je povećao troškove proizvodnje – rusko tržište cenovno je najkonkurentnije u oblasti nabavke strateških mate-

Geopolitical conflicts, more precisely the war in Ukraine, further deepened the consequences of the Covid-19 pandemic (Ciuriak, 2022; Mbah & Wasum, 2022; World Bank, 2022). Inflation, energy crisis and disruptions in global supply chains are in fact the biggest

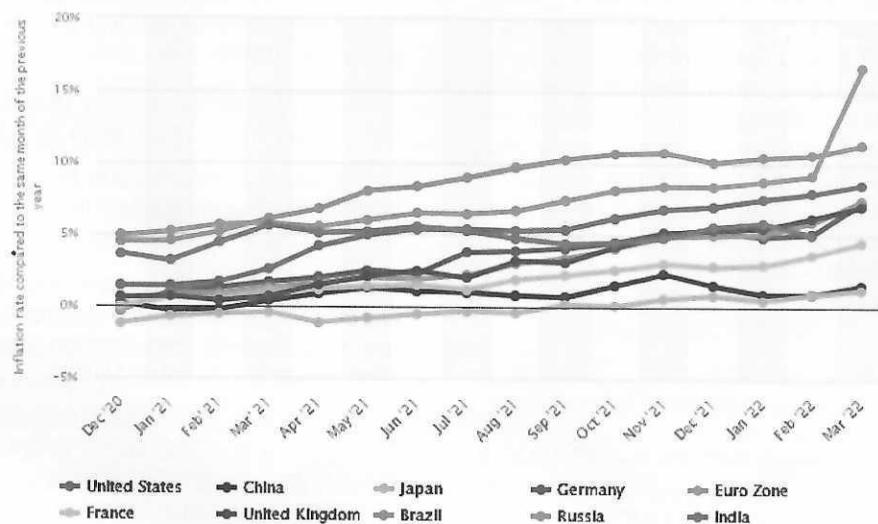
consequences of current geopolitical conflicts. The global economic recession is best reflected in rising interest rates (Figure 7) and inflation rates globally (Figure 8), with a very high price level of all commodities.

**Figure 7. Movement of interest rates at the global level - March 2022.**



Source: <https://advisor.visualcapitalist.com/mapped-interest-rates-by-country-in-2022/>

**Figure 8. Growth of inflation rate by countries in the period December 2020 - March 2022.**



Source: Statista (2022)

The prices of raw materials on the stock exchange remained at a high level, and some recorded further growth after the level of 2021. Financing the supply of raw materials and spilling over the growth of prices to customers is a challenge that the management of all internationally oriented companies continues to face. Geopolitical conflicts have posed additional problems to the management of many companies, with partners in Russia and Ukraine, the biggest of which are the following:

- Delays in imports/exports to the Russian market, after which trade with Russia stops completely - In the period March-April there is a delayed realization of deliveries, which leads to delays in imports of raw materials from Russia and Ukraine, but also exports of finished products to these markets, which directly affects the delay of all activities in the supply chain of companies cooperating with these countries.

- Drastic increase in transport costs and difficult finding of transport company - In parallel with the introduction of a series of sanctions against Russia, transport costs are growing (due to high fuel prices) and it becomes a real challenge to find a transport company with an affordable price. will realize transport, until the import/export measures are completely stopped by the sanctions.

- More complicated customs procedures - Serbian companies cooperating with the Russian market during the period March-April faced additional paperwork in the implementation of imports/exports - statements and documentation of the final destination of goods imported and exported. Since Europe has taken measures against Russian owners of capital in Europe with a package of sanctions, Serbian companies have also faced the problem of importing/exporting already ordered goods from

rijala za prerađivačku industriju, posebno metala koji kotiraju na LME berzi. Evropske kompanije nude metale istog kvaliteta, sa znatno većim, skoro dvostruko većim premijama. Prestankom uvoza ovih sirovina sa ruskog tržišta, postao je pravi izazov pronaći dobavljače na drugim tržištima koji će ponuditi isti kvalitet po približno pristupačnoj ceni;

- energetska kriza direktno je uticala na skok cena energenata, koji je dodatno povećao cenu proizvodnje, a samim tim i problem njenog finansiranja;
- kupce je teško zadržati zbog stalnog rasta cena jer se skok cena svih faktora proizvodnje preliva i na cenu finalnog proizvoda.

Automobilska industrija u Srbiji prva je na udaru posledica rata u Ukrajini. Već mesecima prvi je izazov da se obezbedi blagovremeno snabdevanje čipovima, što dodatno otežava trenutna geopolitička situacija. Tokom protekle godine, cene i novih i polovnih automobila porasle su u proseku za 16 odsto. Srpska automobilska industrija uvozi veliki broj sirovina sa ruskog tržišta, zbog čega su posledice prvo kašnjenja, a potom i zaustavljanja realizacije uvoza drastično usporile ovaj sektor privrede. Hemijska, metalska i građevinska industrija u Srbiji i dalje koriste stare zalihe, ali njihovo poslovanje u narednom periodu može biti dovedeno u pitanje, jer su veoma zavisne od uvoza. Glavna neizvesnost za srpsku privredu jeste činjenica da niko ne može da predviđi koliko će trajati trenutna situacija, a od njenog trajanja zavisi težina poremećaja u lancima snabdevanja srpskih kompanija, a samim tim i njihov opstanak na tržištu.

Svetska ekonomija počela je da se oporavlja od posledica pandemije COVID-19, ali je kriza u Ukrajini izazvala nove probleme i dovela u pitanje rast i razvoj svih zemalja na globalnom nivou (Rae, 2022). Predviđa se da će oporavak svetske privrede od posledica pandemije i rata u Ukrajini trajati dugo. Pravi izazov je pravilno upravljati lancem snabdevanja u trenutnim okolnostima. Finansiranje nabavke sirovina, skok cena svih sirovina/energenata, pronalaženje cenovno konkurentnih alternativnih dobavljača i zadržavanje kupaca najveći su problemi top menadžmenta međunarodno orijentisanih kompanija. Opstanak kompanije u sve neizvesnjim uslovima na globalnom nivou zavisi i od uspeha u prevaziđenju svakog od prethodno navedenih problema.

## ZAKLJUČAK

Svet se suočava sa jednom od najvećih ekonomskih i političkih kriza u istoriji. Posledice pandemije COVID-19 i rata u Ukrajini usporile su i zaustavile privredni rast i razvoj zemalja širom sveta. Ekonomска recesija i poremećaji u globalnim lancima snabdevanja ugrozili su poslovanje međunarodno orijentisanih kompanija, stavljajući pred njihov top menadžment brojne izazove koje treba savladati kako bi opstali na tržištu: obezbediti finansiranje poslovanja, prevazići kašnjenja u proizvodnji kroz pronalaženje alternativnih i cjenovno pristupačnih izvora snabdevanja, organizacija proizvodnje uz smanjenje troškova i održavanje odnosa sa kupcima. Najveću neizvesnost predstavlja činjenica da se kraj rata u Ukrajini ne nazire, što u narednom periodu može dodatno prouzrokovati probleme sa kojima se suočavaju kompanije u upravljanju svim procesima u lancu snabdevanja i što može ozbiljno da ugrozi njihov opstanak.

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European companies where the owner or one of the owners is a Russian.

- The loss of price-competitive suppliers of strategic raw materials from Russia has drastically increased production costs - The Russian market is the most price-competitive in the field of supply of strategic materials for the processing industry, especially metals listed on the LME stock exchange. European companies offer metals of the same quality level, with significantly higher, almost twice as high premiums. With the cessation of the import of these raw materials from the Russian market, it has become a real challenge to find suppliers on long markets that will offer the same quality at an approximately affordable price.
- The energy crisis has directly affected the jump in energy prices, which has further increased the cost of production, and thus the problem of financing it.
- It is difficult to keep customers due to the constant growth of prices because the jump in prices of all factors of production spills over into the price of the final product.

The car industry in Serbia was the first to be hit by the consequences of the war in Ukraine. For months now, the real challenge has been to ensure the timely supply of chips, which is further hampered by the current geopolitical situation. Over the past year, prices of both new and used cars have risen by an average of 16 percent. The Serbian car industry imports a large number of raw materials from the Russian market, which is why the consequences of first delays and then stopping the realization of imports have drastically slowed down this sector of the economy. The chemical, metal and construction industries in Serbia still use stocks, but their business in the coming period may be called into question, because they are highly dependent on imports. The main uncertainty for the Serbian economy is the fact that no one can predict how long the current situation will last, and the severity of disruptions in the supply chains of Serbian companies, and thus their survival in the market, depends on its duration.

The world economy began to recover from the consequences of the Covid-19 pandemic, but the crisis in Ukraine caused new problems and brought into question the growth and development of all countries on a global level (Rae, 2022). It is predicted that the recovery of the world economy from the consequences of the pandemic and the war in Ukraine will take a long time. The real challenge is to manage the supply chain properly in the current circumstances. Financing the supply of raw materials, the jump in the prices of all raw materials/energy sources, finding price-competitive alternative suppliers and retaining customers are the biggest problems of the top management of internationally oriented companies. The survival of the company in ever more uncertain conditions on a global level also depends on the success in overcoming each of the previously listed problems.

production delays by finding alternative and affordable sources of supply, organization of production while reducing costs and maintaining partnerships with customers. The biggest uncertainty is the fact that the end of the war in Ukraine is not in sight, which in the coming period may further deepen the problems faced by companies in the management of all processes in the supply chain, which can seriously jeopardize their survival.

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