

GAZDASÁG & TÁRSADALOM

Journal of Economy & Society

TARTALOM

- Siklósi Veronika – Széles Zsuzsanna
Gondolkodjunk fenntartható elvek szerint globálisan és cselekedjünk helyben,
avagy jó gyakorlati példák a bankszektorból
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Lead Agile with Goals. The OKR Method – Application in a Savings Bank
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- Lenti, Attila
Agroforestry: An Agroecological Practice in the Light of Ecological Economics

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TANULMÁNYOK/STUDIES

Gondolkodjunk fenntartható elvek szerint globálisan és cselekedjünk helyben, avagy jó gyakorlati példák a bankszektorból

*Think sustainably global, act local or
best practices in the banking sector*

Siklósi Veronika¹ – Széles Zsuzsanna²

Absztrakt: A kereskedelmi bankok napjainkban a fenntartható fejlődési célok szerint működnek, az általuk már kialakított jó gyakorlati példák igen hasznosak, példamutató értékűek lehetnek más vállalkozások számára is. Kutatásunkban két nemzetközi háttérű bank jó gyakorlati példáit vizsgáltuk az elmúlt két évben a csoportszinten közzétett fenntarthatósági jelentéseik alapján.

Kutatásunk célja, a kiválasztott példák bemutatása révén felhívni a figyelmet arra, hogy a fenntartható fejlődési célok érdekében tett intézkedések a pénzügyi vállalkozások üzleti érdekeit is támogatják. A pénzügyintézetek ESG célok mentén kialakított stratégiája a jobb reputáció mellett, támogatja a partnereik, beleértve a befektetőik, ügyfeleik, szállítóik, illetve a saját munkavállalóik elkötelezettségét is, növeli a lojalitást, további értékesítési lehetőségeket teremt. A társadalmi jólét megteremtése közös érdekünk. A bemutatott helyi kezdeményezések megvalósítása egy-egy apró lépés a hosszú úton, ami még előttünk áll.

Kulcsszavak: *ESG teljesítmény, fenntarthatóság, fenntartható pénzügyek, fenntarthatósággal kapcsolatos közzététel, bank*

JEL-Kódok: *G21, G32, O16*

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Abstract: Commercial banks operate according to sustainable development goals. We introduce some best practice of these financial institutes, which can be very useful for other companies as well. In our research, we examined the best practices of two banks with an international background based on their sustainability reports published at group level in the last two years.

The aim of our research, through the presentation of selected examples, is to draw attention to the fact that the measures taken to the sustainable development goals also support the business interests of financial enterprises. In addition to a better reputation, their strategy based on ESG goals supports the commitment of their partners, including their investors, customers, suppliers, and their own employees, increases loyalty, and creates additional sales opportunities. Creating social welfare is our common interest. The implementation of the presented local initiatives is a small step on the long road that still is ahead of us.

Keywords: *ESG performance, sustainability, sustainable finance, sustainability-related disclosure, bank*

JEL Codes: *G21, G32, O16*

Bevezetés

A kereskedelmi bankok célkitűzései között az elmúlt néhány évben egyre meghatározóbbak a fenntarthatósági szempontok. A zöld szemléletmód nem újkeletű a tudományban és az egyes gazdasági területeken, azonban az egyértelműen látszik, hogy a pénzügyi intézetek esetében napjainkban is jelentős a transzformáció (Baranyi et al., 2022). A számviteli beszámoló a vállalkozások adatait tartalmazó dokumentum, mely jogszabályi előírás alapján, rendezett formában ad képet a közzétételt követően a vállalkozásról, s amely ingyenesen elérhető valamennyi érdekelt számára. A vállalkozások fenntarthatósági jelentésükben további minőségi információt nyújtanak a külső és belső érintettek számára a környezeti, társadalmi és gazdasági szempontok szerint. A hazánkban működő legtöbb pénzügyi intézet számára, mint közérdeklődésre számot tartó gazdálkodó 2017 óta előírás nem pénzügyi kimutatás közzététele, melyben beszámolnak a fenntarthatósági törekvéseikről.

A bankoknak központi szerepük van a tőkeforgalomban, közvetítői pozíciójuk miatt alapvető szerepet játszanak a pénzügyi források fenntartható tevékenységekhez történő irányításában (Cerqueti et al., 2023) mind

a hitelezési politikájukon, mind befektetéseiken keresztül. Fenntarthatósági jelentéseiken keresztül közelebbi képet kaphatunk az ESG 3 alappillérről. Baldissera 2023-ban publikált tanulmányában a fenntarthatósági jelentéstételről szóló tanulmányok fejlődését vizsgálta a bankszektor esetében az 1990-es évektől 2021-ig, célja a kiugró fázisok azonosítása és értelmezése volt. Baldissera kiemeli, hogy a fejlődés, az irodalomban nem megszokott módon, külső és belső meghatározó tényezők alapján történt, ebben az időszakban a fenntarthatóság jelensége, fogalma folyamatos és mélyreható változásokon ment át, továbbá fontosnak tartja, hogy a jelenleg még jelentéstételre nem kötelezett bankoknak is fel kell készülniük a fenntarthatósági jelentés készítésre. A jövőre vonatkozó trendekből pedig egyértelműen azonosítja, hogy egyre több vállalat számára teszik majd kötelezővé a jelentés készítését (Baldissera, 2023).

2025-től a Magyarországon működő vállalatok egy része szintén köteles lesz fenntarthatósági jelentést készíteni, ez azokat a vállalkozásokat érinti, amelyek a legalább 250 fő foglalkoztatott, 40 millió euró árbevétel, illetve 20 millió eurós mérlegfőösszeg hármas kritériumrendszerből legalább két feltételt teljesítenek, azaz az Európai Unió KKV (Kis- és középvállalati) kategória kritériumát elérik. Bár megjegyezzük, hogy azoknak a cégeknek, amelyek beszállítói az EU-ban működő, vagy oda exportáló nagyvállalatoknak, már most is készíteniük kell fenntarthatósági jelentést, mivel az uniós szabályozás a partnerektől ezt már most megköveteli.

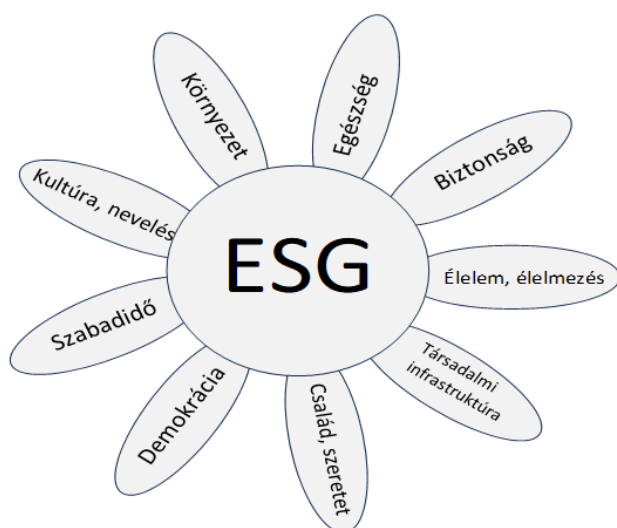
Vizsgálatunk elkészítésekor abból indultunk ki, hogy a kereskedelmi bankok jó gyakorlatai igen hasznosak és példamutatóak lehetnek a kis- és középvállalatok számára.

Kutatásunkban két általunk kiválasztott pénzügyi fenntarthatósági jelentéseit vizsgáltuk az elmúlt két évben közétett nem pénzügyi jelentései alapján.

Véleményünk szerint az ESG célok mentén kialakított stratégia a jobb reputáció mellett, támogatja a partnereik, beleértve a befektetőik, ügyfeleik, szállítóik, illetve a saját munkavállalóik elkötelezettségét is, növeli a lojalitást, további értékesítési lehetőségeket teremt. Az itt bemutatott helyi kezdeményezésekkel, egy-egy kiragadott példával szeretnénk felhívni a figyelmet arra, hogy egy jó ügyszökhöz kapcsolt marketing kampány egy-egy apró lépés azon a hosszú úton, ami a fenntarthatóság problémakörének megoldásában még előttünk áll.

A szakirodalom áttekintése

Az 1. sz. ábrán az életminőségről alkotott képünket mutatjuk be. Bár az életminőség látszólag nem kapcsolódik a gazdasághoz és a fenntartható fejlődéshez, a valóságban azonban véleményünk szerint az életminőségről, a jólétről alkotott társadalmi vélekedés mégis alapvetően befolyásolja a fenntarthatóságot is. A jólét és a fenntarthatóság közötti kapcsolat bemutatását szemlélteti az 1. sz. ábra az életminőség fontosabb összetevőiből kiindulva (Kerekes, 2018).



1.ábra Az életminőség fontosabb összetevői

Forrás: Saját szerkesztés

Kerekes Sándor A környezetgazdaságtan alapjai c. könyve alapján.

Az Európai Unió stratégiájában kiemelt fontosságú szerepet játszik a fenntarthatóság három fő dimenziója, az ESG (gazdasági, a környezeti és a társadalmi) pillérek. Az Európai Unió taxonómia-rendeletében az éghajlatváltozás mérséklése; az éghajlatváltozáshoz való alkalmazkodás; a vízi és a tengeri erőforrások fenntartható használata és védelme; a körforgásos gazdaságra való átállás; a szennyezés megelőzése és csökkentése; a biológiai sokféleség és az ökoszisztémák védelme és helyreállítása területein fogalmaz meg elvárásokat, mely elvárások a fenntarthatóság előmozdítására irányulnak. Az Európai Unió stratégiájának alappillére a klímasemleges unió 2050-ig történő elérése, a gazdasági tevékenységek környezeti szempontú fenntarthatóságának megteremtése.

2023. január 1-jétől a közérdeklődésre számot tartó nem pénzügyi nagyvállalatok köréből azoknak a vállalatoknak, melyekre a következő kritériumok közül kettő legalább érvényes, miszerint az éves árbevétel negyven millió euró felett van, a mérlegfőösszeg húsz millió euró felett van, a munkavállalók átlagos létszáma ötszáz fő felett van, is közzé kell tenniük az előző éves beszámolási időszakra vonatkozóan, hogy a gazdasági tevékenységeik mely környezeti célkitűzéshez járultak hozzá jelentős mértékben, ismertetniük kell a környezeti szempontból fenntartható gazdasági tevékenységekkel kapcsolatos teljesítménymutatóikat és az azokhoz kapcsolódó információkat. A kulcsfontosságú teljesítménymutatók (Key Performance Indicators, KPI-s) az árbevételre, a tőkekiadásokra, a működési költségekre és azok arányára vonatkoznak. 2025. január 1-től a KKV-k egy része szintén köteles lesz fenntarthatósági jelentést készíteni.

A vállalkozások fenntarthatósági törekvései megjelennek a vállalati küldetésben, a jövőképben, a cég stratégiájában. A fenntarthatósági célokat befolyásolhatják a különböző kulturális tényezők, akár az erkölcs, a vallás vagy az iskolázottság, de a demográfiai tényezők úgymint a népesség száma vagy az életkor, illetve a nemek alakulása is, továbbá nem szabad megfeledkezni az egészségügyi és szociális tényezőkről sem, amelyek szintén valamennyi szereplőre hatással lehetnek (Gast et al., 2017).

A gazdasági, környezeti és társadalmi attitűdök vállalati mérettől függetlenül valamennyi vállalkozásra meghatározhatóak. Az uniós taxonómia-rendelet segítségével a piaci szereplők a zöldtevékenységekről hiteles képet kaphatnak. Az EU CSRD-irányelve (Corporate Sustainability Reporting Directive, CSRD), ami többek között előírja a tőzsdén jegyzett kis- és középvállalkozások számára a fenntarthatósági jelentés elkészítését, egyúttal lehetővé tette, hogy a tőzsdén jegyzett cégek által használt fenntarthatósági standardok egyfajta iránymutatást adjanak a többi KKV számára a fenntarthatósági információk megjelenítésében.

A fenntartható fejlődés és a vállalkozások közötti kapcsolat eredményeként született meg a fenntartható vállalkozás fogalma. A fenntartható vállalkozásokat általánosságban úgy jellemezhetnénk, hogy olyan vállalkozások, amelyek működésük során nemcsak a gazdasági tevékenységükre vannak tekintettel, hanem a környezeti és társadalmi szempontokat is figyelembe veszik.

A vállalkozások, tevékenységük során figyelemmel vannak a környezeti és a társadalmi problémákra is, és azok megoldására törekszenek (Schaltegger & Wagner, 2011) azonban Gast és szerzőtársai szerint egyedül

a környezeti folyamatok előtérbe helyezése a fenntarthatóság sarokköve, ebből kiindulva a fenntarthatóság véleményük szerint egyedül az ökológiai dimenzióan keresztül valósulhat meg, ezért a fenntartható vállalkozásnak egypilléres modellre kell épülnie (Gast et al., 2017). A legtöbb kutató szerint ma már egyetértés van abban, hogy mindhárom ESG pillér fontos. Azt, hogy a gazdasági, környezeti, társadalmi pillérek közül melyiknek van nagyobb súlya, számos tényező befolyásolja, a társadalmi értékeken keresztül a gazdasági fejlettségig. Bár a hangsúly a környezeti dimenzió irányába tolódott el az elmúlt évtizedben és a figyelem az ökológiai fenntarthatóságra irányult, mert a kormányok felismerték, hogy a szűkösen rendelkezésre álló természeti erőforrások előbb-utóbb a gazdasági növekedés gátjai lehetnek, azonban azt is felismerték, hogy mindez rendkívül kedvezőtlen és súlyos társadalmi hatással is jár majd (Böcskei és Somogyi, 2023).

Részünkről egyetértünk azzal, hogy fenntarthatóságról, fenntartható vállalkozásról akkor beszélhetünk, ha a három pillér egyaránt jelen van. Természetesen mi is tudjuk, hogy a pillérek kölcsönösen hatnak egymásra, és egyetértünk azzal is, hogy a gazdasági, környezeti és társadalmi hatások súlya eltérő lehet, és ezek a súlyok idővel változhatnak.

Igaz, hogy a fenntartható vállalkozásokkal és üzleti modellekkel kapcsolatos definíciók igen széles spektrumot ölelnek fel, azonban vannak olyan gyakorlatok, elméletek és eszközök, illetve olyan általános fogalmak, amelyek tekintetében egyetértés mutatkozik a szakirodalomban, úgymint: az értékteremtés és értékajánlat; társadalomba és környezetbe beágyazott küldetés; hosszabb időhorizont és a korábbiaknál lassabb, autonómabb üzleti fejlődés; belső szervezeti átalakulás; pozitív, átgondolt etikus vezetés; progresszív együttműködés a piacokkal és a piaci szereplőkkel; valamint az ellátási láncok újragondolása (Gosztonyi, 2021).

A hosszú távú tervezéshez a fenntartható gyakorlatok fontossága kiemelendő. A társadalom azt igényli, hogy a vállalatok korlátozzák a folyamatos növekedésüket (Aksoy et al., 2022). A marketing területén dolgozók rájöttek, hogy a vállalatoknak foglalkozniuk kell az ügyfelek társadalmi és erkölcsi problémáival és olyan promóciókat kell bemutatniuk, melyek hatással vannak e problémák megoldására. Felmerül a dilemma, hogyan lehet egy vállalat gazdasági, társadalmi és környezeti felelősségvállalásán keresztül a legjobban megteremtteni a fenntarthatóságot (Jung et al., 2020). Az ökológiailag megalapozott módszerek korai megközelítéseként a zöld marketing utat nyitott a későbbi innovációknak (Adwan & Altrjman, 2024).

A fenntarthatóság azért is előtérbe került, mert a fenntarthatósági kérdések megoldásával, új piacokra és versenyelőnyre tehetnek szert a vállalkozások (Allen et al., 2019), a fenntarthatóságot úgy határozzák meg, hogy a vállalatok gazdasági hasznot termelnek belőle, valamint környezeti és társadalmi előnyökkel is járhat számukra (Sharma & Jaiswal, 2018; Kemper et al., 2019).

A kutatás bemutatása

Kutatásunk elsődleges célja jó gyakorlati példák kiemelése a pénzüintézetek fenntarthatósági tevékenységéből, mely példákat a fenntarthatósági marketing eszközök segítségével is elérhetővé tesszük a felhasználók számára.

Kutatásunkban két általunk kiválasztott pénzüintézet fenntarthatósági jelentéseit vizsgáltuk az elmúlt két év (2021 és 2022) között nem pénzügyi jelentései alapján, tartalomelemzési módszertant alkalmazva. Az 1. sz. táblázat bemutatja a vizsgált pénzüintézeteket létszám és mérlegfőösszeg alapján. Mindkét bank esetében a konszolidált csoportadatok bemutatása helyett, csak a magyarországi entitások adatait tüntettük fel.

1.táblázat A vizsgált pénzüintézetek köre

Pénzüintézet megnevezése	Dolgozói létszám (fő)	Mérlegfőösszeg (Milliárd Ft)
<i>OTP Bank Nyrt. (OTP Core Magyarország)</i>	10.317	15.758.29
<i>UniCredit Bank Hungary Zrt.</i>	1.774	5.052.40

Forrás: Saját szerkesztés a bankok 2022. évi auditált beszámolóit alapján

Vizsgálatunkat manuális tartalomelemzéssel hajtottuk végre. A kutatás időkerete: 2021-2022. Kutatásunkban két fő területre fókuszáltunk, melyből az egyik a helyi vállalati kezdeményezések megfigyelése valamilyen társadalmi, környezeti cél támogatása kapcsán, azaz a célhoz rendelt promóció megfigyelése, a másik pedig az ügyszóhoz kapcsolt marketing vizsgálata, azaz az értékesítéshez kötött adományozás, társadalmi célt támogató értékesítésösztönzés megfigyelése.

A 2. sz. táblázatban a vizsgált pénzüintézetek csoportszinten készített fenntarthatósági jelentéseinek oldalszámát mutatjuk be.

2. táblázat A vizsgált jelentések

Év	A vizsgált jelentések oldalszáma OTP Csoport	A vizsgált jelentések oldalszáma UniCredit Csoport	A vizsgált jelentések oldalszáma összesen
2022	574	200	774
2021	118	192	310
Összesen	692	392	1.084

Forrás: Saját szerkesztés a bankok auditált jelentései alapján (2023)

Az általunk kiválasztott témát, mint promóciós lehetőségeket figyeltük meg az online térben, értve ezalatt a két pénzüintézet közösségi média felületét (LinkedIn) és saját weboldalát.

Megállapítottuk, hogy az általunk megfigyelt társadalmi, illetve környezetvédelmi célú ügyeket a fenntarthatósági jelentések mellett mindkét bank online promóciós hirdetésekben, social media (közösségi média) felületen és a saját weboldalán is megjelenítette.

A kiragadott példák kapcsán megállapítottuk, hogy mindkét hazai pénzüintézet a WWF (World Wild Fund for Nature – Természetvédelmi Világalap) Föld órája kezdeményezésében a vizsgált években részt vett, mely során március utolsó szombatján egy órára lekapcsolták a világítást és áramtalanították az elektromos készülékeket. Ez a kezdeményezés évről-évre felhívja a figyelmet a környezet védelmére, mindkét bank saját internet oldalán, a közösségi média oldalán és sajtócikkeiben is megemlíti az eseményt, melynek segítségével reputációjuk tovább javulhat.

Mindkét pénzüintézet esetében elindult egy faültetéshez kapcsolódó kampány. Az UniCredit a Treedom-mal partnerségben megkezdte egy 90.000 fából álló UniCredit erdő létrehozását, ezzel hozzájárulva a globális CO₂-kibocsátás mintegy 20.500 tonnával történő csökkentéséhez. Az Erdőmentő Alapítvány szakmai koordinációjával 250 fa ültetésében az UniCredit saját önkéntes dolgozói is részt vettek, akik az ócsai tájvédelmi körzetben, egy olyan láperdőben segítettek, ahol a klímaváltozás miatt egy gombafaj kezdte pusztítani a magas kőriseket.

Az OTP Bank a Priceless-Planet Koalícióval történt együttműködésben támogatja a faültetést, a Föld legsérülékenyebb területein található erdők újratelepítését. A kezdeményezés olyan erdőterületekre koncentrál, amelyek helyreállítása globálisan a legnagyobb pozitív hatással van a klí-

mára, a közösségekre és a biológiai sokszínűsége, Brazíliában az amazóniai és az atlanti-parti esőerdők, Kenyában a vízgyűjtő területek, Ausztráliában az erdőtüzek által elpusztult zöldterületek helyreállítása a cél.

A faültetéshez kapcsolódó kampányok jó hatással lehetnek a reputáció növelésére, a munkavállalók és a partnerek lojalítására.

Ügyhöz kapcsolt marketing (Cause-related marketing) eszközök segítségével megvalósítható a lehetőséghez kötött adományozás, egy társadalmi célt támogató értékesítésösztönzés is.

Az UniCredit esetében egy 2022. évi kampányt szeretnénk kiemelni, mely alapján valamennyi papíralapú kivonatról e-kivonatra áttért ügyfél után a magyarországi pénzügyi intézmények egy újabb fát ültetett. A papírmentes kivonat kivezetése a bank számára nemcsak környezetvédelmi okokból, de költség-haszon elvű szemléletmód alapján vizsgálva is igen előremutató, a hozzá kapcsolt kampány révén az ügyfeleket is bevonva tudtak pozitív hatást gyakorolni a természetre és a környezetre.

Megemlítendő még a Suhanj Alapítvány támogatását célzó kezdeményezésük, mely a Spar Jótékonyági Maratonon önkéntes UniCredit dolgozók részvételével valósult meg, valamint a szintén önkéntes UniCredit dolgozók jótékonyági főzése, illetve sütése, melynek révén az Élelmszerbank támogatásával mindkét vizsgált évben a rászorulókat segítették.

Az OTP Bank a honlapján egy adományozó programot hirdet, a programra egyesületek és alapítványok pályázhatnak, a bíráló bizottság által kiválasztott nyertes programokat az ügyfelek mobilappon keresztül utalással, interneten keresztül kártyás fizetéseikkel vagy OTP ATM-eken keresztül OTP bankkártyás fizetéssel támogathatják.

Az OTP Helyi Érték önkéntes pályázati programban pedig évente 500 munkavállaló a saját közösségük támogatásában tud részt venni még hozzá a következő négy fő cél megvalósítása érdekében, pénzügyi tudatosság előmozdítása, helyi közösségek, hátrányos helyzetűek, fogyatékkal élők támogatása.

Mindkét bank a fenti kezdeményezéseket több platformon is megosztja (saját honlap, linkedin közösségi média oldal) a külső és belső felhasználókkal, így lehetőséget teremt a pénzügyi intézmények irányában fennálló bizalom növelésére, rövid távon az értékesítés növekedésére, hosszabb távon a pozitív reputációra.

A vizsgált beszámolók alapján úgy gondoljuk, hogy a fenntartható fejlődési célok mentén kialakított stratégiájuk hozzájárul a jobb reputáció

ójukhoz, támogatja a partnereik, beleértve a befektetőik, ügyfeleik, szállítóik, illetve a saját munkavállalóik elkötelezettségét is, növeli a lojalitást és további értékesítési lehetőségeket is teremt.

A bemutatott helyi kezdeményezések megvalósítása egy-egy apró lépés a hosszú úton, ami még a társaságok előtt áll, de a jó példák jó irányba vezetnek.

A csoportszintű fenntarthatósági jelentések vizsgálata alapján elmondhatjuk, hogy az elmúlt években nemzetközi szinten a kockázatok felmérése, a kockázatkezelő rendszer kiépítése volt az elsődleges prioritás. Továbbá szeretnénk kiemelni a Németországban 2023. január 1-én hatályba lépett LKsG beszállítói lánc törvényt (LKsG Lieferkettensorgfaltspflichtengesetz – A vállalati átvilágítási kötelezettségekről szóló törvény az emberi jogok megsértésének megakadályozása érdekében az ellátási láncokban). Az LKsG-ben foglaltak megsértése már komoly anyagi szankciókkal jár, akár 8 millió eurós bírságot is kiszabhat a hatóság, a törvény értelmében a vállalkozások felelőssége már nem csupán saját vállalatukra vonatkozik, hanem a teljes ellátási láncra kiterjed, így nemcsak német, hanem jónéhány magyar vállalatot is érint.

Az LKsG alapján mind a német mind a magyar vállalatok vonatkozásában véleményünk szerint kijelenthetjük, hogy a fenntarthatósági jelentések készítése a versenyképességükre is hatással van. Reisinger Adrienn tanulmányában arról olvashatunk, hogy a társadalmilag felelős tevékenységnek milyen hatása van a versenyképességre, származik-e ebből versenyképességi előnye a vállalatoknak. Véleménye szerint mindez nehezen kimutatható (Reisinger, 2023), amivel egyetértünk, de kiemeljük, hogy vannak már olyan gyakorlatok, például az imént említett német példa, ahol jelentős versenyelőnyt jelent a törvénynek való megfelelés. Mindemellett mi is azon a véleményen vagyunk, hogy ha a fő motiváció nem a versenyképességre való hatás, hanem pl. a mások megsegítése által megélt jó érzés, akkor ebben az esetben is lehet hatása és előnye a CSR-tevékenységek (Corporate Social Responsibility, Vállalati Társadalmi Felelősségvállalás) meghatározásának (Reisinger, 2023).

A pénzügyetnek számára ma már a jövedelmezőség mellett a CSR-tevékenység is kulcskérdéssé vált. Flores-Hernández és munkatársai kutatása azt mutatja, hogy a CSR hatással lehet egy vállalatra hírnevére, márkájának imázsára egy fejlődő gazdaságban (Flores-Hernández et al., 2020). A környezetvédelem iránti elkötelezettség kulcsfontosságú egy vállalkozás piaci hírneve és fenntarthatósága szempontjából (Gomez-Trujillo et al., 2020), mellyel mi is egyetértünk.

Bízunk benne, hogy egyre több vállalat veszi át a pénzüintézetek jó gyakorlatát és egyre több olyan kezdeményezést láthatunk majd a gazdaság különböző területein, melyek nemcsak a profitmaximalizálást célozzák meg, hanem a fenntarthatósági célokkal is harmonizálnak.

Összefoglalás

A társadalmi jólét megteremtése és mindennek megjelenítése a promóciókban, a profitmaximalizálás mellett néhány éve stratégiai fontosságú szerepet tölt be a pénzüintézetek életében. Vizsgálatunk alapján megállapítottuk, hogy az UniCredit Bank Hungary Zrt. és az OTP Bank Nyrt. nagy hangsúlyt fektet a társadalmi célok megvalósításának és az általunk vizsgáltak alapján például a faültetés kampányt az UniCredit Bank Hungary Zrt. közvetetten is alkalmazta értékesítés ösztönzésre.

A fenntarthatósági jelentéseiken túl a pénzüintézetek saját honlapjukon és közösségi média oldalukon is megjelenítik a fenntarthatósági törekvéseik eredményeit. Számos promóció indul a helyi kezdeményezések bemutatásáról valamilyen társadalmi, környezeti cél támogatása kapcsán és egyre több olyan értékesítésösztönző, az értékesítéshez kötött adományozás történik, mely valamilyen társadalmi cél megvalósulását szolgálja. Napjainkban a bankok is gyakrabban használják a közösségi média platformjait. 2020-ban készített tanulmány szerint egy márka népszerűsítése esetében a közösségi média használata közvetlen hatást jelenthet a fogyasztói lojalitásra, és közvetett hatással lehet a brand (márka) értékére is, növelheti a fogyasztók bizalmát a brand iránt (Ebrahim, 2020). A fogyasztói márka iránti elkötelezettség szignifikánsan befolyásolható az elektronikusan továbbított üzeneteken és az újdonságokon keresztül a közösségi média igénybevétele révén (Cheung et al., 2020). A márkahűség, az ismertség és az észlelt minőség erős korrelációs kapcsolatot mutat a fogyasztók márkához kapcsolódó érzelmi és ésszerű reakcióival (Zollo et al., 2020). Egy 2020-as tanulmány szerint a vállalat piaci pozíciója azon alapul, hogy mennyire elkötelezett a környezeti felelősségvállalás iránt (Gomez-Trujillo et al., 2020). A vállalkozások a zöld marketing módszerek segítségével javítani tudják a reputációjukat (Mukonza & Swarts, 2020).

Az általunk bemutatott példák a kiválasztott pénzüintézetek CSR tevékenységének egy-egy szeletként javíthaták a reputációt és erősíthették a

bankok márkáját. Természetesen, mint minden kutatásnak, így a mi vizsgálatunknak is számos korlátja van, amelyeket figyelembe kell vennünk, mielőtt levonnánk a következtetéseinket, vizsgálatunk mindenekelőtt rendkívül korlátozott mintán alapul, egyelőre csak a figyelem felkeltését tartottuk fontosnak ezen a területen, néhány jó gyakorlat megosztásával. Célunk a kutatás folytatása és további jó gyakorlatok feltárása és bemutatása a vizsgált pénzügyi intézetek ESG jelentései alapján.

Az Economist Impact, mint az Economist Group tagja, elsősorban nemzetközi vezető vállalatokkal, civil szervezetekkel, alapítványokkal és kormányzatokkal együttműködve támogatja a fenntarthatósági törekvéseket. 2022 márciusában egy nemzetközi elemző társaság a SAS az Economist Impact megbízása alapján Bankolás 2035-ben címmel egy mélyreható felmérést készített, a bankszektor különböző területeit, a vállalati, kereskedelmi, lakossági és digitális bankokat képviselő több mint 500 vezető megkérdezésével, mely alapján feltárták a 2035-ig a bankszektor előtt álló legfontosabb kihívásokat és lehetőségeket. A felmérés alapján a mai bankvezetők a jelenlegi trendeket, nem fenyegetésnek, hanem a fejlődésük új inspirációjuknak látják, talán ez összefügg azzal a relatív stabilitással, amit a bankszektor fel tudott mutatni a globális világjárvány során összehasonlítva a globális pénzügyi válság időszakával. A szektor képes volt a digitális szféra gyors változásainak befogadására, a vásárlók változó igényeinek kielégítésére. Az ESG gyakorlatok felkarolásában is úttörő szerepet játszanak az egyre inkább tapasztalható növekvő nyomásnak köszönhetően az ügyfelek, közösségek és más külső érdekelt felek részéről, azonban az ESG gyakorlatok felkarolása és azok kiterjesztése a bankok nyereségén felül még nagy kihívás, feltérképezetlen terület. A vezetők készek elindulni a változás irányába. Bízunk benne, hogy az elkövetkező évtizedben a gyakorlat is ezt mutatja majd.

Leon C. Megginson beszéde alapján Charles Darwinnak tulajdonított idézet szerint nem a legerősebb marad életben, nem is a legokosabb, hanem az, aki a legfogékonyabb a változásokra. A pénzügyi intézetek véleményünk szerint elindultak a változás irányába, bízunk benne, hogy a többi vállalkozásra, a vállalkozások tulajdonosaira, vezetőire és döntéshozóira is ösztönzőleg fog hatni a fenntarthatósági tényezők fontossága, annak érdekében, hogy életben maradjon a bolygónk.

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URL: <https://tinyurl.com/4u4xw8e2>
- UniCredit Bank Hungary – LinkedIn.
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Lead agile with goals. The OKR method – application in a savings bank

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Abstract: To achieve their corporate goals, savings banks in Germany use several controlling-systems. These systems are often combined with assessment-systems for the employees. Mostly they are carried out annually, for example as part of discussed conversations.

But are these systems still suitable to steer the contributions of individual employees to achieve the company goals in a more and more dynamic world? The OKR method (O stands for “Objectives”, KR stands for “Key Result”) a possible alternative.

The OKR method was used in the examined medium-sized savings bank for three years. After the first few runs it became clear that a modification becomes necessary. For this purpose, the author (together with a manager of the savings bank) used the results from the OKR reviews were evaluated. A new concept was created for an adapted application of the OKR method for savings bank.

The findings are not just interesting for savings banks, but for all companies who deal with the OKR method.

Keywords: *Goals, Objectives and Key Results, OKR, Planning, Strategy, Leading*

JEL Codes: *M12 – Personal management*

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Introduction

This article deals with the current topic of target control in companies with a more conservative environment: the topic is illustrated using the example a concrete savings-bank in Germany. Savings-banks are a typical form of local banks in Germany. Nowadays, companies, which join in traditional target agreements, reach their limits. Such target control systems have so far been used, on the one hand, to distribute (sales-) goals and monitor their achievement. On the other hand, they were used to evaluate the performance of employees.

As part of a leadership workshop the managers (of the savings bank involved in the investigation) expressed their dissatisfaction with the previous target control system.

The reasons for the dissatisfaction were varied. On the one hand, the target control was perceived as too rigid and the connection to the evaluation system as not fair. An alternative was found with the idea of an agile target control using OKR. Many modern companies use this OKR method based on John Doerr.

Against this background, the following research questions were investigated as part of the study. They serve targeted research:

Research question 1: To what extent is the OKR method suitable for goal management and as a management tool in a savings bank?

Research question 2: To what extent can the OKR method be used in a savings bank?

To introduce the reader into the topic, the second chapter of this article shows the theoretical background of methods to target control systems. In the first part of these remarks, the theoretical foundations of the management method by means of “Objectives” and “Key Results” (OKR) were presented. Examples for the application of the method are also presented. In the second part, the reader is also presented with alternative ideas and methods for managing goals.

In the chapters three and four the concrete application in the examined savings bank is presented. The third chapter contains a representation of the special conditions of the medium-sized savings bank. The necessity of suitable target systems, the differences of organizational units and the

challenges in the application will be shown. In the fourth chapter, a concept will be developed specifically for the savings bank with possible solutions and the adapted design of an agile target management tool based on the OKR philosophy.

Finally, the fifth chapter summarizes the findings of the thesis.

OKR - an agile method for goal control

All companies are required to achieve their corporate aims on the organizational units, which they regularly formulate and record in their strategies. The challenge is to make them sufficiently concrete for the individual teams and their members and to make them manageable. This is where a modern method comes into play that is making its way from Silicon Valley to Europe and Germany: Objective and Key Results (OKR) (Praz, 2022).

The creator of the agile goal management system OKR is Andrew Grove. He introduced and used this new method in 1971 at Intel (change-ment, 2022). OKR is a leadership model that John Doerr drew attention to in 1999 by adapting it for using it for Google to develop, measure and implement. He helped Google through OKR in the founding phase served to control the development and growth of goals. This was a role model for numerous other companies (Doerr, 2018). For example, Edeka, Daimler and the Deutsche Telekom already use OKR (die.agilen, 2022). Studies show that agile management methods – such as OKR – are popular in practice (Becker et al., 2020).

How the method works

The OKR model is a cyclical process that uses Objectives and Key Results to support employees and managers to work together and focus their efforts to make a measurable contribution to achieving the corporate goals (Niven, 2016).

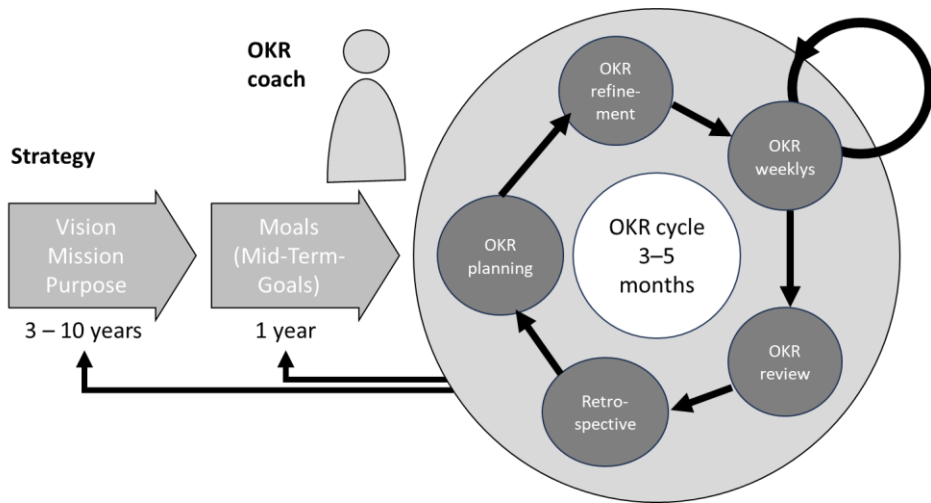


Figure 1: Illustration of the OKR control loop

Source: own illustration based on Niven & Lamonte, 2016

The OKR control loop is an agile process. Based on the normative framework the company sets so-called moals (mid-term goals) for one year. This is followed by three to four OKR cycles of three to five months each year. An OKR cycle starts with the so-called planning. Weekly or fortnightly meetings follow – these meetings are called “weekly”. The cycle ends with the review/retro. Then follows the next cycle, starting with the planning (Niven & Lamonte, 2016).

The individual elements of the OKR model are described below in their character.

Target Element – Moal

Not mandatory, but often helpful, is the use of mid-term-goals (Moals) (changement, 2022). This type of goal incorporates elements from the normative framework, usually consisting of values, vision, mission, and strategy. Moals thus serve as a link between the normative or the strategic level and the company’s target system. They apply for one year and form the annual focal points of the target system for this period (Niven & Lamonte, 2016).

Suitable moals could fulfill the following requirements:

- superordinate (abstract and not measurable)
- achievable within one year
- qualitative
- wide scope for action
- formulated in a positive and motivating way with verb (Weber, 2019).

These requirements are not mandatory. Likewise, moals are not necessary. Nevertheless, they provide orientation for deriving “objectives” (change-ment, 2022).

Target element – objectives

For each cycle, objectives (“Os”) are formed, if applicable, derived from the moals. These objectives describe “what” is to be achieved and they are also referred as “what-goals”. objectives can be set from “above”, i. e. by team leaders or from within from the hierarchy via the cascade. They also can be set from the team – under the moderation of the team leadership. In this way they apply to the entire team. In the literature there is (varying by type of task, type of team etc.) a mix of approx. 60% from above and approx. 40% from below considered suitable. It is also possible for different teams to form common objectives (Kudernatsch, 2019).

The requirements for a suitable objective can be:

- overarching “what”-goal (not detailed and not measurable)
- implementable within one cycle (in contrast to the moal)
- sufficient room for maneuver
- formulated in a positive and motivating way with a verb (Weber, 2019)

The team has about two to four objectives per cycle, towards the achievement of which the team members work toward with their own contribution goals, known as key results (Niven, 2016).

Target element – key result

Key results (KRs) for the cycle in question are also achieved by each individual team member as a contribution to one or more objectives. A key result describes what a team member specifically intends to do for the respective cycle. It shows how or what he or she contributes to the achievement of the objective (Niven, 2016). Therefore, a Key Result also can be referred as a “how-goal” (Niven & Lamonte, 2016).

For appropriate key results (as opposed to objectives), general requirements for goal formulations, for example according to the SMART model.

Appropriate requirements for a key result can be:

- (S) specific
- (M) measurable
- (A) attractive
- (R) realistic
- (T) terminated – results from the end of the cycle (Helmold & Terry, 2021).

The relationship between the types of goals in the OKR model are shown below in the form of the target model:



Figure 2: Target system for the OKR method

Source: own representation

To illustrate this, examples from the savings bank example for formulating goals are shown below.

- *Moal*: “We increase the digitization level of our savings bank!”
- *Objective*: “We are expanding our technical capabilities in our Department!”
- *Key Result*: “I create a digital sample file!”

Process Element – Cycle

The duration of a cycle is between two and four months, depending on the task. In most cases, a cycle lasts for three months. In principle other periods are also possible – a single cycle is also feasible. It is be noted, however, that a synchronization of the cycles in terms of time and content can be of the cycles can make sense, especially if the target world is also synchronized (Breyter, 2022).

Each cycle starts with the planning. After this, the weeklys are carried out. The review/retro then forms the conclusion (Niven & Lamonte, 2016).

Process element – Planning

In planning, the parameters for the beginning cycle are defined. In a workshop the team members of the respective team or organizational unit or organizational unit initially work on the objectives under the moderation of the team leader. If necessary, the Moals and the specifications of the hierarchy (communicated via the hierarchy levels to the teams) or the team management must be considered. As a result, the team is provided with objectives, to which the individual members can respond with the help of their individual key results. The formulation of the key results forms the end of the planning process, so that the objectives and key results for the cycle are fixed (Niven & Lamonte, 2016).

Process element – weekly

The weekly meetings usually take place on a weekly basis at a uniform date and for a short period of time, for example half an hour (Wozni, 2021). Another rhythm may be appropriate – fortnightly weekly – for example – are also possible. Ultimately the rhythm is determined by the task. In the context of the weekly each team member announces the current status of his or her goal achievement and the degree of goal achievement. For this purpose, the key results of the individual team members are visualized, for example with a meta-plan-wall or electronically with a table and provided with the degree of target achievement to enable transparency and a dialog. Necessary adjustments in the formulation of objectives also take place here. In addition, an exchange between the team members can take

place about the need for support or problems in the achievement of goals (Kaufmann & Servatius, 2020).

Process element – review/ retro

In the review / retro, the team looks back on the past cycle in the context of a workshop. This is also where the respective cycle comes to an end. This review takes place on two levels (Teipel & Alberti, 2019).

The *review* deals with the content issues of the past cycle. Questions can be:

- What was the level of goal achievement?
- What helped with goal achievement?
- What inhibited goal achievement? (Weber, 2020)

The review should be done in a structured way. There are numerous methods for this in the literature methods that help to create a suitable framework, to collect the necessary information, to gain insights, to define possible measures and to conclude the workshop. Examples include the Starfish method, and the 4-L Retrospective are mentioned (Ng & Kuduk, 2024).

In the *retro*, on the other hand, we look back at the organizational content of the last cycle in order to be able to make improvements for the following cycles.

Questions are asked here such as:

- Was the cycle well organized?
- What can be better organized in the cycle (Weber, 2020)?

The retro can also be done in a structured way.

The aim is to learn from the past cycle in terms of content and process for the next cycle (Wozni, 2021).



Figure 3: Cycle representation as an agile process for teams.

Source: own representation

Process element-Team

Even if OKR is used in the classic form of goal management for the entire company and at a lower level for organizational units, the method can also be used for any other form of team. For example, for management teams, project groups and work groups or for one-off activities across groups. The elements of the OKR method should always be considered, such as the moderating and orienting role of the team leader (Stray et al., 2021).

Whether the OKR method is appropriate ultimately depends on the task at hand. The OKR method is more suitable for creative tasks or implementation tasks, i. e. tasks that involve intensive collaboration and exchange. In the literature, therefore, other, alternative methods for the goal control.

Alternative methods for target control

A short overview of alternatives is given in the following table:

Table 1: Target control systems

	MBO	sharing	OKR
Goals	goals are agreed, Employees then have to achieve goals, Performance goals	Goals are recorded on the goal card, independent further development and goal achievement, operationalization of company goals from planning, primarily performance goals	focus on goals, independent further development and goal achievement, Moals and Os for orientation possible, performance goals and development goals
Time frame	fixed	fixed	fixed
goal achievement	1	90 - 100%	60 - 70 %
Performance evaluation	Performance evaluation based on goal achievement	Performance evaluation without goals	Performance evaluation without goals
direction of effect	top down	team specifications from planning	60% top down, 40% bottom up
fixpoint	goals from the leader	goals card	Moals, Os
Focus	run	run	change

Source: own representation

A common characteristic of the shown target control systems is an effect for a fixed point in time. Furthermore, in all systems targets are used for performance control.

The differences in most demarcation points are mainly found in the degree of of the design options.

Management by objectives (MBO), in German “Führung durch Zielvereinbarung”, aligns the agreed goals of individual employees with the company’s goals, so that team members feel motivated and involved in their work (Fernandes, 2023). The Management by Objectives model was first introduced by Peter Drucker in his 1954 book “The Practice of Management”. Peter F. Drucker also focuses on monitoring the performance of team members using reporting and performance appraisal tools (Drucker, 1976). “Sharing” (in German: “Teilen”), on the other hand, is not a scientific management method. This approach originates from the widespread handling of target management in Sales units of banks. For this article, the description of the method from RMW (management consultancy from Zurich), which the Sparkasse uses in the sales units, was used. “Sharing”

combines elements of MBO and OKR and serves the autonomous distribution of team goals among the individual team members (Weber, 2019).

OKR features the greatest scope for team members and opens an extension of the steering idea in the areas of change and development (Stray et al., 2021).

Further development of OKR and creation of a concept for the savings bank

First, the question arises why the test savings bank dealt with the topic of target systems and what made it necessary to change or modernization of the old target system.

The previously used target system was relatively free in terms of content and could be varied according to the tasks of the teams. In addition, the achievement of goals was linked to the (performance) evaluation of the employees and was discussed in (semi-) annual meetings between employee and leader. One of the topics discussed at a management meeting was the target system – it was questioned. This system was perceived as outdated and in parts also as unfair, because:

- The link between the target system and evaluation prevented ambitious goals from being set. Because the focus was on achieving goals.
- The low frequency of the conversations (twice a year) did not allow for energy and focus. The effects of ambitious goals were also not visible.
- The rigid one-year target was not flexible as reactive, timely adjustment was not possible or foreseen.

Based on the results of the management conference, the leaders of the savings bank to look for new ways of target management with the help of a management consultancy. In order to take into account, the specifics of the savings bank under evaluation, it was necessary to the diversity of tasks in the organizational units and teams of the savings bank.

In more and more companies, parallel modes of modes of division of labor are becoming more common. Exemplary of this are the terms used in the financial sector, where managers distinguish between “run the

bank” and “change the bank.” In “Run the Bank” mode, day-to-day business is handled, and core processes are improved. The “Change the Bank” mode, on the other hand, aims to change the basic logic. change the basic logic. This refers to the business model, i. e. the way in which value is created for customers way value is created for customers (Cachelin, 2015).

The type of tasks performed by the respective organizational units in the studied savings bank differ in the respective proportion of tasks between day-to-day business and strategic or process-related tasks. While the sales units predominantly perform tasks related to day-to-day business, the share of strategic tasks in the staff units increases. The goals of in the respective organizational units are therefore also dependent on the task.

If we now add the aspect that goal management can also include goals that affect employee development, then goal control is also a leading tool. This aspect was missed at the management meeting.

A new idea for goal control had to be found that was suitable to focus and energy to a goal in a structured way and at the same time to have a motivating effect. OKR was presented as a solution by the accompanying management consultancy (RMW, Zurich) and tested in the savings bank. Initially, OKR was used as a pilot in two staff departments and an OKR variant (“sharing”) adapted by the management consultancy was introduced as a test in two branches. After initial positive experiences, OKR was rolled out throughout the company.

The experience gained from the reviews and retros after one year and three cycles made it necessary to a renewed examination of OKR was necessary. The feedback from the reviews and retros shows the experiences of the respective teams. The survey was carried out in the reviews and retros with the help of the following questions within the framework of a a workshop:

- What do we need more of?
- What do we need less of?
- What can we leave out?
- What should we keep doing the same?
- What can we do new?

The review results were spotted and structured by the author together with a division manager of the savings bank. The main statements are summarized below – initially in general and then separately according to reviews and retros as well as positive and negative statements.

General assessment

The initial euphoria with which OKR was launched has subsided. The attractiveness of the method was not always high in the teams since it was often perceived as additionally especially when the impression arose that OKR neglected the day-to-day business. In addition, the benefits of OKR were not sufficiently clear. It shows mixed picture, which is particularly influenced by the different tasks of the teams in the respective organizational units. While the sales units also predominantly reflected sales focal points in their objectives, the staff units tended to focus more on development. Positive aspects were the expansion of their own room for maneuver and the opportunity to learn from each other in the weekly meetings.

The general assessment for the entire savings bank was summarized as follows:




How do you rate the motivation and energy with which you want to achieve the goal?	How do you rate your focus on the goal?	How do you rate your persistence in working towards the goal?
		

Figure 4: Overall summary of the first overall cycle.

Source: Results presentation (research savings bank)

Review of content

In the review of the content, positive assessments were made of the goal management, results and the impact of OKR.

The path from Moals over Objectives to Key Results was helpful from the point of view of the participants, since it provided an orientation for the formulation of key results and the focus on and that the focus was on the overall objectives of the company. Another positive that the achievement of objectives was between 80% and 90% for most of the employees, the respective teams and the company as a whole. The goals (key

results) motivated employees and the high level of ambition led to positive experiences. Likewise, the possibility of an interim goal adjustment was found useful and motivating. Overall, OKR was successful despite external pressures (e. g., from Corona). The quality of the key results was improved, and the implementation of the key results was more important than the evaluation by a percentage.

The results also led to satisfaction. The essential results made it possible to lay the foundations (preparatory work) for future tasks. In addition, it was possible to work rigorously on topics such as specific earnings goals or personal development goals. The regularity and structure of the weekly meetings helped.

OKR had a positive effect on goal achievement in the sales control system (goal maps). The formulation of key results shared by several team members has also proven effective. In staff areas, topics from “to-do lists” were taken up and implemented. Also, for special topics, such as the introduction of a new employee or a central campaign could be consistently implemented with the help of the Key Results.

In contrast, for goal management (both for objectives and key results), negative experiences were also gathered on the effect of OKR in general.

For example, Objectives were often formulated in such an open or general way that the team members would have preferred more concrete and selective objectives for formulating more specific and selective objectives to guide them in formulating suitable key results. It also fits that the team also had difficulty in formulating suitable objectives.

Similarly, the development of key results was a great challenge, because new impulses, the right goal size and depth was often difficult to find and formulate (“SMART”).

It was also difficult to maintain the enthusiasm for OKR and the quality of the key results.

In addition, there was sometimes a tendency to formulate mundane tasks as key results instead of formulating key results as motivating, inspiring goals. Overall, employees and managers wanted more freedom in the design of objectives and key results.

The impact of OKR was also perceived to be weakened, because the cycle was perceived as “poor” overall. The achievement of objectives was not satisfactory or very heterogeneous in some areas, as there were, for example, teams where weeklys were sometimes canceled in order not to interfere with day-to-day business.

In the end, the way OKR was handled was still heterogeneous and the goals were handled differently. In addition, it turned out that a coordination of the goals (objectives and key results) with the goals of other teams and organizational units – as well as with actions outside of the OKR and goal management world, for example sales campaigns.

Organizational review – retro

Positive feedback was received in the Retro for the areas of weekly, impact and general organization.

The 14-day rhythm of the weekly was considered suitable and, since it was set up as a fixed date, helpful. In the sales units, a frequency of four weeks was viewed as positive.

An improved internalization of the use of OKR among teams and team leaders as well as more routine in the weekly is seen as positive. In this respect, the review/retro contributed to learning and development. The last cycle was also viewed as the best cycle to date (organizationally). In addition, a good effect was achieved through rigorous work.

Similarly, the overall organization of OKR was perceived to have improved. Initially, a guideline was very helpful, which was created by the personnel department of the savings bank, and which has been made available. The change from four to three cycles a year was also viewed positively. One challenge (due to Corona) was to move away from face-to-face weeklys to the use of Skype. This change was positively received, as it created a stronger stringency. The alternation in moderation, in which each team member is considered as a moderator, also has proven to be effective, as it has increased identification with OKR. It was positively noticed that the OKR-Weekly stands on its own and is not mixed with other topics or used as a team meeting.

Overall, there was now greater certainty in the running of OKR. And it was suggested that OKR should also be used to manage cross-organization-unit objectives or team objectives and to and to effect change in general.

Negative feedback was received on the topics of general organization, goals, weeklys, collaboration between teams, and OKR in the hierarchy provided. OKR's general, overarching organization could be improved. Thus, Cycle changes, i. e., the transition from Review / Retro to the next Planning were not well timed and unclear and were therefore perceived as bumpy. It was also suggested that the weeklys should again be held in

face-to-face form in order to increase the dynamics. At the same time, the opposite suggestion was made, to keep the implementation via Skype.

For the purpose of goal control, it was suggested that the objectives and key results should be collected or to make them transparent in order to improve cooperation. The idea was also formulated to create team key results, i. e. one team key results, i. e. one key result for several team members.

For the weeklys, it was noted that there was often not enough time to hold them. Therefore, there was a demand to keep them and not to skip them. Also was demanded that the weeklys should take place monthly. One suggestion was to have allow cross-team guest participation in weeklys.

Collaboration between the teams could be deepened by providing cross-team support in working on key results could be deepened. Also, cross-team objectives were also suggested to improve task completion and collaboration were suggested.

On the question of how OKR should be structured in the hierarchy and whether and how cascaded (i. e., along the hierarchy levels), there was uncertainty. This is because questions such as “Is there also an ‘o-hierarchy’ along the organizational hierarchy?” or “To which objectives do managers form their key results?” were not answered.

Overall, the results from the reviews and retros were very heterogeneous. While individual topics can be defined by regulation, for example, the cycle duration, other topics such as the target focus (sales target or development goal) can be more difficult to grasp. It became clear that there are still unclear about the design of OKR, but also that there were conceptual deficits in the savings bank. It appeared necessary to adapt OKR both conceptually and in its handling seemed necessary.

Further development of OKR and creation of a concept for the savings bank

A team of two from the second management level of the studied savings bank, consisting of consisting of the author and another division manager, dealt with OKR. OKR was questioned in general and in its elements and compared with other target management systems in the literature in the context of a workshop with the help of a comparison. First of all, the design scope of OKR were illuminated, and then a concept was developed that would make the application of OKR specifically for the savings bank under

investigation. This was followed by an assessment to be able to measure the success of the adjustments. This work was carried out in three steps:

- First work session
 - Determination of the approach
 - Review of all documents
 - Formulation of work orders
- Processing work orders
 - Each individually
- Second working sessions
 - Compilation of results
 - Documentation of the results in the concept paper (presentation)

Design spaces

First, it was found that the design of the moals can be very variable. Moals are based on the company's normative framework and take into account the strategy, planning, cultural and value framework, vision, mission, target images and external requirements. This base allows a wide latitude for the formulation of moals, which does not makes it easy to find suitable moals. The formulation can then be in the form of moderated workshops or (with the help of a guide), for example by the management. The moals found in this way then form the basis for the development of objectives. There – depending on the task of the teams – objectives can also be formulated without moals (e. g. for special tasks, like campaigns), moals can be dispensable. If suitable objectives can be found without orientation to Moals, for example orientation by the team leader, the development of Moals can be dispensed with.

Since OKR is suitable for goal management of tasks for both formal and informal teams, goals can also be formulated and used for both team types. The design of the goals then differs in the degree of freedom, since the formal working groups (e. g. organizational units or project groups) and their tasks are integrated into the existing processes of the company involved. Therefore, the formulation is based on the moals (if available). In contrast, moals usually cannot help informal groups, such as work groups or informal teams, because of their particular task.

In addition to the possibility of orientation through goals, the intervention or participation of the team leader can also influence the design of goals. The degree of influence can also be varied. The range extends from the goal setting to the free formulation by the team members. Assessing the suitability of the goals remains the responsibility of the team leader.

The goal formulation depends on the team's task and can be varied in terms of its degrees of freedom, both in terms of direction and the degree of specification.

The contributions of the individual team members, the key results, are formulated independently by the team members and affect the objectives. Although the key results should be formulated specifically (“smart”), there is also scope for design here. A key result can be, for example, a task goal or a development goal. A team member can make and edit one or more key results. It is also possible for two or more members to formulate a common key result.

The design of the weekly can also be varied. First is the rhythm of the meeting variable. Project groups also have a weekly meeting proven as well as in teams with special tasks. On the other hand, for teams with a 4-week rhythm may also be suitable for a high proportion of operational tasks. A 14-day rhythm is most common at the researched savings bank.

Furthermore, the weekley can be varied in terms of duration and content. If as part of the weekly, the current status of the key results alone are discussed, the duration is shorter than if the current statuses are discussed in detail and the key results are discussed with any obstacles. Depending on the task the duration of the weekly should be varied depending on the team. An integration of the weekly into a team meeting, for example as a separate one agenda item is also possible.

The last design space examined deals with the type of team or the task group. The elements of OKR can be used in any way transferred from group to the studied savings bank. Not only for Organizational units that result from the organizational structure, but for each team that is created through shared tasks – be it formal or informal group – the OKR method should be suitable for goal control. Even if two employees have a common, perhaps temporary, task, they could use OKR as a task and goal management method.

Overall, depending on the task and team structure, OKR can be used and suitable for controlling goals and sometimes also for controlling tasks. A framework can then be built from the possible variations as a design aid. A concept should be used for this purpose for the savings bank examined.

It became clear that OKR is no isolated instrument for the savings bank. So, it must be implemented next to the existing instruments for leadership and target control. OKR is also a leadership tool. Therefore, the savings bank concept needs to be classified into the savings bank’s management instruments. There is also one for orientation differentiation of OKR from other types of tasks is helpful so that the alignment of OKR becomes clear as a tool for goal and task management.

Hereafter you can the conceptual elements for the studied savings bank are determined. In the savings bank examined, OKR is not the only management tool available disposal. The Sparkasse’s management philosophy essentially combines four things leadership instruments, on the one hand, in the relationship between the manager and the individual employees (impulse discussions and evaluation discussions) and on the other hand in the relationship between manager and team (celebrating successes and OKR). It becomes clear that performance is a team effort supported by the OKR method.



Figure 5: Management instruments of the investigative savings bank

Source: own illustration

The embedding in the savings bank's task types makes it clear that here too OKR method is not the only type of task processing to achieve goals.

Naturally, the largest share of task processing is taken up by everyday work, embedded in the hierarchical structure of the savings bank. This is the nature of the Work between the opposite poles of operational work and strategic work. While in sales and production units, operational tasks usually predominate the proportion of strategic tasks is higher in staff units.

In contrast to hierarchically embedded tasks, team composition lies for project groups (or other working groups) outside the organizational structure the company.

OKR can now be viewed as a third element, as this method is one Task processing is possible in any team composition, both within or outside the organizational structure or in a mixed form. In addition, OKR can not only be used as an independent task control tool, but also with its design elements as a target control system for the others forms of work serve.

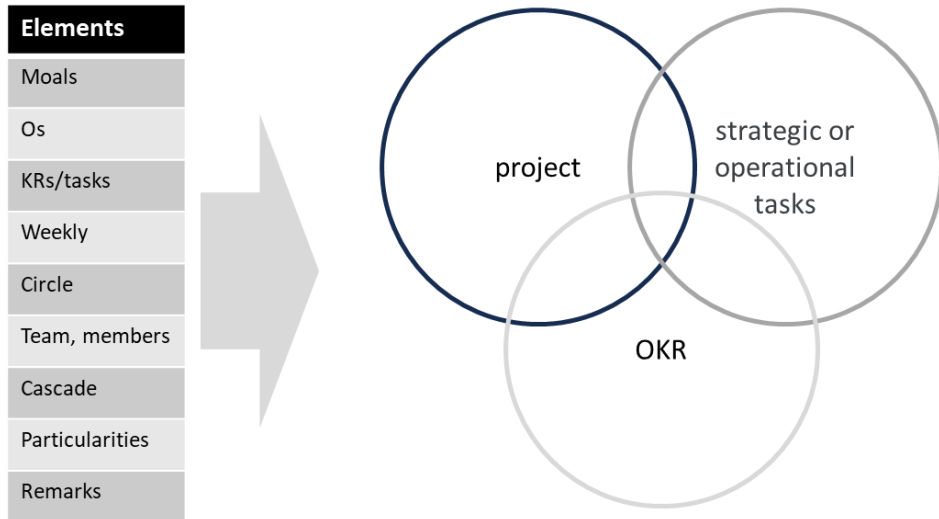


Figure 6: Types of tasks

Source: own illustration

The concept for the concrete application in the studied savings bank must now be Elements of the OKR method for different team compositions and design tasks and thus make them applicable. Here are for everyone Teams, team leaders and all managers share the conceptual ideas to make the application in the savings bank manageable. In addition to this, the actual concept is served by two tools, an application matrix and a regulator system.

With the help of the application matrix, one is created for the elements of the OKR method design for possible team and task combinations shown and the design variants are shown. This is not a hard and fast rule, but to provide guidance.

In the original, the matrix has two additional columns for orientation, in which for two well-known “model companies” also designed the OKR elements are shown.

Elements	Team distribution	Team staff	Working group, across organizational units	Project
Moals	provide orientation	provide orientation	not always relevant	not relevant
Os	often replaced by goal card, Os are possible, act on goal card	formulated by management and team (orientation: 60 to 40%)	O or task were formulated together, leader moderates	Project goals, milestones
KRs/tasks	KRs for Team-Os -> act on goal card	KRs for Team-Os	KRs and tasks of the members werde formulated	Task planning
Weekly	regular meetings, preferably weekly	regular meetings	regular meetings, weekly	Regular project meetings
Circle	4 months	4 months	duration of the O-task	duration of the project
Team, members	Organizational unit in the market, distribution unit	Organizational unit in the stuff	Implementation team, voluntarily	Project team and members
Cascade	No, Sales focus possible	No	No	No
Particularities	relevant is the target map, derived from corporate planning	Relevant is the effect	Single process	Single process, particularly organized in agile projects
Remarks	Focus: run, sales success, development	Focus: change, development	Focus: implementation	Focus: Change, implementation

Figure 7: Application matrix of the investigative savings bank

Source: Concept of the studied savings bank

It turns out that there are differences in the focus of task and goal achievement recorded, but also that the use of for working groups and projects OKR seems suitable. It also becomes clear that the individual design spaces remain variable.

Therefore, a tool that makes the design spaces manageable is useful. A control system that creates the design space between (partly ambivalent) showing opposite poles was therefore added to the concept as a component.

First of all, general regulations should be mentioned that affect the organization of OKR in the company and are intended to provide appropriate guidance.

- Businessprivate
- Circulation.....process
- Developmentperformance
- Flexibilitysecurity

Then regulations for designing the objectives and key results are helpful in order to achieve appropriate ones and be able to formulate suitable goals:

- Runbuild (the bank)
- Runbuild (my competence)
- Normal workadd on
- Goal cardother goals (interplay)

KRs/Os alonetogether (together, helping)
 Os only for the cycle.....intermediate Os
 From abovefrom below (Objectives)
 Cascades.....Single
 “Agree” on goals.....set goals

The lists are not exhaustive and can be supplemented. Still give they provide sufficient assistance and orientation.

In order to assess the implementation of the OKR method in the studied savings bank a suitable scale had to be found first. For this purpose, measure the effectiveness and benefits for the company as qualitative features were used.

The effectiveness was assessed for the impact on the savings bank as a whole, but also for the target areas objectives and key results are considered. In addition, questions were raised that assessed the effectiveness of the contributions as part of the reviews/retros:

- Where could I achieve the most?
- What effect could I achieve?
- Was each individual contribution recognized as important?
- In the reviews and retros it was more like “right, wrong”, or after “different, helps” asked?

In addition, a controlling of the OKR processes and their effectiveness was carried out. It was determined that the respective team leaders are responsible for implementing the OKR method. The human resources department became responsible for the entire savings bank as the “guardian of the system” for the use of the OKR method as a management tool.

Conclusions and recommendations

In the studied savings bank, OKR is used as a management tool (among other Instruments such as impulse discussions and evaluation discussions) for goal management and employee development. In addition, will also consciously create a separation between goal achievement and evaluation.

OKR as management tool in the studied savings bank creates focus, persistence, and energy among team members to increase performance and their development steer.

The OKR method is suitable for goal management and as a management tool in a savings bank (*research question 1*). The benefits of OKR for the studied savings bank extend from: individual employees through to the entire company. This method helps everyone to contribute their own amount and to focus on specific tasks judge. Topics (both everyday topics as well) will be discussed for each team Special topics) can be addressed and structured task implementation is possible. The company management can do this with the help of moals or given objectives control focus for the entire company and achieve impact. For the savings bank as overall, the OKR method is an implementation aid, a goal management tool and a managment tool with which effectiveness and effects can be achieved.

The OKR method is more than a goal management system and can be applied to any Companies and every task can be adapted and used (*research question 2*). OKR can thanks to its agile components for goal control and task processing can be used and is not just based on the structures of the respective company limited but is for every type of formal and informal (work) group suitable. In a modified form, the OKR method can be applied to other savings banks and banks and transfer companies and tasks, for example to projects become. This is made possible by individual design of the process elements to OKR. These can be tailored to the respective task and to the respective Target system can be modeled.

Here too, an individually created one can be used as an aid application matrix and your own control system (based on the example of the savings bank) can be used:

Elements	Characteristics (examples, expandable)	Team A	Team B	Working group	project
Goals	<ul style="list-style-type: none"> • Non • For orientation • as a default 				
Objectives	<ul style="list-style-type: none"> • Specification by team management • joint formulation by team • Mixed forms (e.g. 60/40) 				
Key Results/ tasks	<ul style="list-style-type: none"> • Each teammember • Common KRs 				
Weekly	<ul style="list-style-type: none"> • Regular weekly • different rhythm • if necessary 				
Circle	<ul style="list-style-type: none"> • Regularly every three months • Single pass (e.g. for a project) 				
Team/ members	<ul style="list-style-type: none"> • Formal group/ unit • Informal group • Projekt group 				
hierarchy	<ul style="list-style-type: none"> • Integration • No integration 				
...					
particularities	<ul style="list-style-type: none"> • Integration into agile project organisation • O = goals from goal card 				
Remarks	<ul style="list-style-type: none"> • Focus • special requirements 				

The assignment is determined individually

Figure 8: Sample for creating an application matrix

Source: own illustration

The research questions can be answered in summary as follows: To what extent is the OKR method suitable for goal management and as a management tool in a savings bank?

Research question 2: To what extent can the OKR method be used in a savings bank?

Future research could examine the extent to which the method of the morphological box was used to create the application matrix can be.

Techniques for finding ideas, for example, mind maps or the 6-3-5 method can be used.

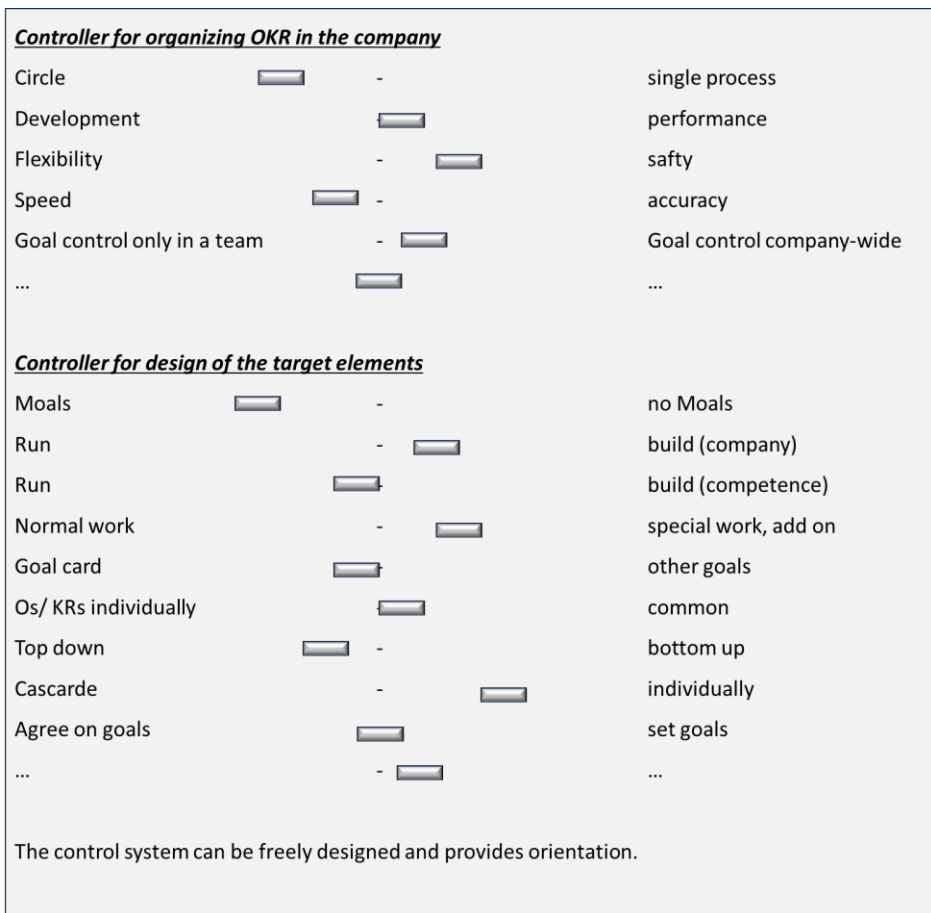


Figure 9: Pattern for creating a control system

Source: own illustration

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The Patterns of Internationalization and Business Process Outsourcing (Bpo) as Keys of Business Internationalization for Multinational Companies

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Abstract: This paper analyzes and presents the outlines of business process outsourcing (BPO) for multinational companies. The methodology of research started with an initial literature review then to go further with the research there was a focus on data analysis and description, The research has focused as well on analyzing the OLI model for BPO and internationalization by suggesting BPO in the model for multinational companies. According to the analysis and results, BPO is relevant for both domestic and multinational companies but some features and restrictions may be possible during the process. Restrictions, strengths, weaknesses and risks that should be taken into consideration by the company that would like to operate as multinational or remain domestic. In conclusion, BPO has become a common contemporary business model with a number of companies seeking to outsource variable costs as much as possible, to establish market relationships with subcontractors and to focus on design and management of the value chain for business values but a resilience plan to mitigate risks during BPO and internationalization is very important.

Keywords: *Business internationalization, Internalization, Business Process Outsourcing (BPO), multinational companies, patterns*

JEL Codes *F20, D45, F23, L25, M16*

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Introduction

As business internationalization has become important for many companies and business holders to reach more business values and expand the business in different markets. Business Process Outsourcing has become a process by which a company and/or organization may identify and increase productivity its and lead to optimization, involving third parties that are outsourced to perform that task or activity. The outsourcing of entire activities is today one of the major strategic options of a firm. However, outsourcing is not without difficulties and risks.

Traditionally, outsourcing is an abbreviation for “outside resource using” (Kopplemann, 1996). According to Arnold (1996) Outside means to create or make up a value from without, not within, the company. This outside focus is not an end in itself, it is a strategic perspective on external resources but identifying these external resources is not enough. They must be used by and for a company in order to strengthen its position in competition (Arnold, 2000). Outsourcing has become an important business approach. Moreover, a competitive advantage may be gained as products or services efficiently by outside suppliers. It is an agreement in which one company hands over a part of its existing internal activity to another company through a contract (McCarthy & Anagroustou, 2004).

The aim of this research and paper is analyzing the outlines of Business Process Outsourcing without forgetting its relevance to internalization and business internationalization. Globalization has gradually shaped the world for ages and it has undoubtedly been accompanied by various waves of industrialization. It moved the world and human society from simple energy resources such coal and wood to fossil fuels for industry as sources of energy and to sustainable energy and business, step by step it globalized the energy market, every step is accompanied by energy consumption, so the intensive use of energy has become fundamental in economy (Benabed & Boeru, 2023). Globalization has, for instance, facilitated the dissemination of technology and information, thereby generating new opportunities for innovation and development, emphasizing that the 4th and 5th industrial revolutions are evidence of it. In addition, it has led to concerns regarding privacy and security, as well as the possibility of job displacement and inequality. (Benabed & Boeru, 2023).

The labor market has known changes but the challenges after the start of the pandemic and the recent international geopolitical instability that

has overwhelmed both emerging and advanced economies because the Crisis of Covid-19 could lead a part of qualified workers to leave their jobs or return under different conditions and high cost of leaving, the thing that makes wages weaker in contrast with the rising rate of inflation in such situations that happen occasionally. On the other hand, it is highly difficult to match all the labor supplies and demands because an occurring inflation impact the supply chain as well (Benabed et al., 2023).

The purpose of this research and full paper is to analyse, describe and present the patterns of internationalization and business process outsourcing (BPO) as keys of business internationalization for multinational companies.

Related literature

Multinational companies (MNCs) and international Business

Multinational corporations or companies (MNCs) are an omnipresent feature of the modern economy, accounting for about one quarter of global output and one third of international trade (Jensen, 2006). Their importance to economic activity increases as the global economy becomes increasingly integrated, and, despite the obstruction and interruption caused by the recent financial recession and crisis, that role is likely to continue to expand (World Bank, 2010) since there might be a substantial deviation from perfectly integrated global markets (Ghemawat, 2011). Given the value and importance of the multinational corporation there has been much research on its role and progress as an institution (Bartlett & Ghoshal, 1989).

Multinational companies executives have struggled to define and determine a suitable role for headquarters to effectively reach and create values from international activities or operations. The frequent large scale reorganizations and reformations of Multinational Companies (MNCs) or corporations' headquarters illustrate and show how uncertain many are as to the better influence and optimal structure of that entity (Bartlett, 1983). Various international business scholars and strategists have therefore conceived to evolve and promote prescriptions for the optimal allocation of business activities between headquarters and the country's subsidiaries (Bartlett & Ghoshal, 1989). For them, the challenge is to balance the tensions inherent in operating internationally achieving an overall effectiveness and dynamic arbitration, while maintaining the suppleness to match

local markets' requirements and needs (Ghemawat et al., 2007). This has led to specific recommendations concerning organizational design of multinational companies (MNCS) that seek to balance the requirements of centralization with decentralization (Bartlett & Ghoshal, 1989).

The international business literature began examining the essential role of headquarters in the multinational corporation by taking into consideration centralization-decentralization continuum as a way to sort out the classic inherent compromise and tradeoff in any multinational between local responsiveness and global efficiency (Prahalad, 1975). With a limited attention to the specific roles played by headquarters, the focus was on the level of delegation and mission of authority to the country subsidiary organizations so the field determined a limited number of generic strategies, possibly best captured in Porter's notion of global and multi-domestic strategies (Porter, 1986).

The background of Business Outsourcing Process in short

Business process outsourcing (BPO) is a method of subcontracting various business-related operations and services to third-party vendors. Although BPO originally or mainly applied solely to manufacturing entities, such as soft drink manufacturers that outsourced large segments of their supply chains, Business Process Outsourcing nowadays applies and focuses on the outsourcing of various services and products (Bloomenthal, 2022). Business process outsourcing (BPO) needs third-party vendors or subcontractors to carry out some parts of their business operations. BPO started with large manufacturing companies to help with supply chain management for values. Today, the Business Process Outsourcing has grown to include all kinds of sectors, without forgetting services companies. Business Process Outsourcing can be considered as offshore outsourcing if the subcontractor or vendor is located in a different country; for instance, in the case of customer support, with companies to facilitate BPO to companies around the world. Thus, BPO today has become an industry unto itself. (Bloomenthal, 2022).

Outsourcing was first recognized as a business strategy in 1989, then, it integrated in business and throughout the 1990s it became such an integral part of business economics (Twin, 2022).

Internalization and Internationalization for multinational companies

According to the previous discussion on the option view to international entry, the initial investment can be analyzed from the perspectives of internalization and internationalization. Internationalization decisions relate to investing a certain amount of capital at entry, i. e., entering by a smaller or larger subsidiary but Internalization decisions address the share in capital that is chosen for entry, i. e., entry by a minority or majority joint venture or a fully-owned subsidiary (Fisch, 2008). Classic internalisation theory (Coase, 1937) says that, conditional on location factors, multinational enterprises (MNEs) emerge and arise when the benefits of internalisation exceed the costs (Williamson, 1975; Rugman, 1981; Buckley & Casson, 2020). As it stands, this is almost tautological. When a company is found to a multinational enterprise (MNE), it is claimed that the net benefit of internalisation is positive, and if it is not an MNE then it is claimed that the net benefit is negative. But internalisation theory contains other propositions or suggestions as well, and it is the synergy between all these suggestions that gives the theory explanatory power (Buckley & Casson, 2020). Internalisation theory covers ‘market-seeking’, ‘resource seeking’ and ‘efficiency-seeking’ MNEs (Dunning, 1958).

Firms that consider investing abroad need to decide about the time and mode of market entry. Choosing the right moment and volume of international entry is important, as its success is affected by uncertainty. In particular, such investment decisions have to respect the environmental uncertainty that is exogenous to the investor’s actions (Adner & Levinthal, 2004). According to the “Long-run Theory of the Multinational Enterprise” by Buckley and Casson (1976), firms circumvent the imperfections of international markets by internalizing business processes concerning tacit knowledge, perishable goods, intermediate products and raw materials. However, internalizing markets may lead to reduced economies of scale, problems of cross-border communication and discrimination by host governments. Calvet (1981) tries to reconcile the theory of internalization with the transaction cost view of markets and hierarchies (Williamson, 1975).

According to Nayyar and Bantel (1994) in early internationalization phenomena, two temporal dimensions occur: precocity and speed. The nature of world markets and of the business activities taking place in this environment call for pursuing opportunities of international expansion as

soon as they emerge and to develop them quickly, in order to gain first mover advantages, scale up learning curves and thus access to profit advantages sooner than global competitors (Nayyar & Bantel, 1994). Starting early is an important pre-requisite for developing experiential learning and contributing to firm performance. The Cambridge dictionary (2023) states as well that the Evidence against particular representations does not put a dent in the concept of internalization, and evidence against the general concept is impossible. (Cambridge dictionary, 2023). Internalization occurs when a transaction is handled by an entity itself rather than routing it out to someone else. This process may apply to business and investment transactions, or to the corporate world (Chen, 2021). In business, internalization is a transaction conducted within a corporation rather than in the open market. Internalization also occurs in the investment world, when a brokerage firm fills a buy order for shares from its own inventory of shares instead of executing the trade using outside inventory (Chen, 2021).

In fact according to Chen (2020) Internalization can also apply to a multinational corporation. This happens when the company decides to shift or switch assets between its own subsidiaries in different countries (Chen, 2021). Furthermore, internalization can occur when an individual, business, or firm decides to handle an issue in-house instead of outsourcing it to a third-party (Chen, 2021). Besides, companies may decide to internalize the production of a particular material on its own rather than having another manufacturer do so. This process is called internal sourcing, or delivering products to customers through the business's own channels instead of using an outside shipping company (Chen, 2021). Internalization is beneficial to a company as it cuts down the costs of outsourcing certain process such as manufacturing or selling products and services. The process also provides benefits to brokers, who can make money on the spread, or on the difference between the purchase and sale price (Chen, 2021). It seems that the traditional approaches to international entry need to be enriched for a dynamic analysis. Buckley and Casson (1998) state that early models of the multinational enterprise did not foresee the rising importance of uncertainty in today's foreign direct investment decisions. Therefore, Buckley and Casson propose a new approach, the theory of real options. Rivoli and Salorio (1996) argue that the theory of real options incorporates the question of "when" a foreign direct investment takes place after a location has been selected for entry (Buckley & Casson, 1998).

Multinational enterprises (MNEs) take over and coordinate their foreign direct investments (FDIs) so as to grow and improve their effectiveness and performance. Back to history, the main view on MNEs' international strategy has been that they do business globally (Friedman, 2005) and (Levitt, 1983). Through internationalization, the company can introduce products or services to other countries that do not yet have them or do not have them (Benabed, 2023). A multinational company is a company that operates in several countries where it may have factories, offices or points of sale and normally there is a country where it begins operations and we can call that company a parent company and the rest of the countries where the multinational has been established and extended over time will be called subsidiaries (Benabed, 2023). Multinational companies have got various characteristics and implications for business values and no matter their size small, medium or large they need to focus on the aspects of sustainability and digital opportunities to reach the clients' satisfaction and be close to them (Benabed, 2023).

Business Process Outsourcing and the FIAT industry evidence

According to Balcet (2020) the reasons for outsourcing and its effects may vary according to the activity being outsourced. Outsourcing has been a widely and extensively applied strategy in the automobile industry but the academic jury on its contribution, efficiency and relevance to profitability is still out; Zirpoli and Becker (2011) argued that "companies' outsourcing too much" such as FIAT in the 2000s decreased and lowered their control on key technologies, with negative effects on performance (Balcet et al., 2020).

According to Balcet and Ietto-Gillies (2020) from an organization of production point of view strategies of outsourcing can be seen as fragmenting the production process through various firms. However, such strategies at the same time will be able to integrate also industries and sectors. Outsourcing can take place within and across nation-states. In the latter case, the fragmentation or integration due to outsourcing extends and enlarge also to countries and markets as it is possible to be seen and observed with global value chains. (Balcet & Ietto-Gillies, 2020). Balcet and Ietto-Gillies (2020) stated in their research that Firms have always used external channels to assure supplies. The theoretical issue behind the dichotomy inter-

nalization versus externalization has been the goal of many studies following Coase (1937) and it is usually observed in terms of minimization and decreasing of transaction costs. (Balcet & Ietto-Gillies, 2020).

Balcet and Ietto-Gillies (2020). Stated in their research that they focused on three main elements of strategy: (a) geographical localization of production with specific emphasis on internationalization strategies, (b) outsourcing versus internalization of production and (c) strategies towards labour and how they interact with (a) and (b) in other words they act in such a way as to provoke and undergo a series of reciprocal actions and reactions. Following a theoretical analysis of these three strategic elements, we shall then apply it to a study of Torino the Italian Car Factory as known in Italian *Fabbrica Italiana Automobili di Torino (FIAT)* in its historical setting since World War II. The three elements are considered in the context of the overall company's trajectory or path. Other elements of strategies might be commented on if and when they are seen as interacting with the three that are the object of our analysis (Balcet & Ietto-Gillies, 2020).

Methodology and research questions

The methodology of research started with an initial literature review then to go further with the research there was a focus on data analysis and description, the research has focused as well on analyzing the OLI model for BPO and internationalization by suggesting BPO in the model for multinational companies.

The research questions that helped go further with this research and analysis are the followings

RQ1: What outlines of BPO are there and why is it a suitable model for multinational companies?

RQ2: How outsourcing can be successfully applied as a business process?

RQ2: What potential restrictions could be possible for multinational companies?

Analysis and results

Business Process Outsourcing as an applicable modality with restrictions

Basically, as BPO is important for internationalization, it is necessary to mention the loss of internal skills which can prove detrimental over time. The dependence that can be established on service providers, there is also the quality degradation that could be a risk. When the service provider or subcontractor is not faced with the final market, there is also a possibility of a loss of information on the production process and the formation of costs, the disconnection between external partners and internal functions may cause communication difficulties or loss of opportunities. There are also the risks linked to the irreversibility of an outsourcing decision which concerns the links in strategic value chains for the ordering company.

We can mention the costs of contracting and supervision, the often underestimated costs linked to the management and control of the service provider, the costs of exits and relations with the service provider, especially if they have gradually become essential. Attention must also be drawn to conflicts of interest which may arise between the main company and the service provider. According to Williamson (1958), suppliers can also be opportunistic and pose a risk of hold-up. Due to incompleteness of contracts and information asymmetries. In other words, they can take advantage of the situation by degrading the quality of the service, reducing the volumes produced or even raising their prices if they are in a position of strength.

Internalization, Internationalization and the relevance of BPO for the OLI model

Chen (2020) states that An eclectic paradigm, also known as the ownership, location, internalization (OLI) model or OLI framework, it is a three-tiered evaluation framework that companies can follow when attempting to determine if it is beneficial to pursue foreign direct investment (FDI). This paradigm assumes that institutions will avoid transactions in the open market if the cost of completing the same actions internally, or in-house, carries a lower price. It is based on internalization theory and was first expounded upon in 1979 by the scholar John H. Dunning (Chen, 2020).

The OLI model suggested by Dunning in 1988 is one of the classic paradigms and it is rather a paradigm than a theory in internationalization that can be applied for companies that would like to go multinational or remain domestic, as being multinational in business is about companies that operate in multiple countries or markets. Some models may explain, predict, prescribe or tell the company what to do in business but the OLI model that is about reaching internationalization and it explains why and how the company may go multinational or remain domestic in business. (See figure 1). As internationalization needs some parameters, with some attention the OLI model may be applied as well, but the company before using this model should do some research about the market and follow what we call information assumption.

The core idea is that as a first step for internationalization if the company starts with a focus on its ownership advantages that may characterize and distinguish it with a competitive advantage and value such as genuine product, services or a brand or even operations and business processes, if not the company has to remain domestic and operate in the international market of the country of origin. As a second core idea and step if the company owns an interesting ownership with which it can enter markets abroad, it has to do some research about the best and most suitable locations for its business and operations abroad to go multinational by focusing on different aspects that may bring various advantage to its market and operation abroad in other countries such as low salaries, suitable or low taxes, big demands, suitable locations for sales and a suitable geographical position. (See figure 1). As for internalization, the multinational company or business holders may go and decide with their abilities between two business processes: internationalizing with foreign direct investments FDI, if it the company has the ability. If not the company may remain multinational but through licensing or outsourcing products and services abroad or near its area. (See figure 1).

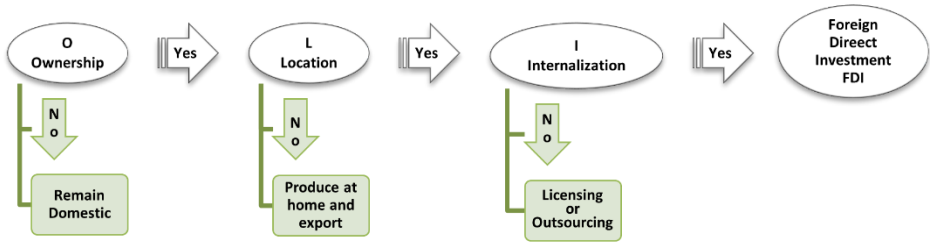


Figure 1. Internalization model and Business Process Outsourcing (BPO)

Source: Author’s design and contribution, 2023, Adapted from the Eclectic Paradigm by Dunning (1988) (By adding and suggesting Outsourcing in the model)

The outsourcing of services through subcontracting for competitive values

Subcontracting refers to the situation in which a main company hires a contractor company in search of the outsourcing of some services or manufacturing activities that the main company decides not to take charge of, leaving that service in charge of the specialized company. The contractor could hire a subcontractor company in the event that the main the company that could be multinational cannot carry out the service. The outsourcing of services through subcontracting implies the obligation of the contracting company to carry out the service at its own expense and through its own supply of work. Outsourcing or labor subcontracting regime is a figure through which an employer provides a service or executes works in favor of a contractor who supervises the development of the services or works executed. (See figures 1, 2, 3 and 4).

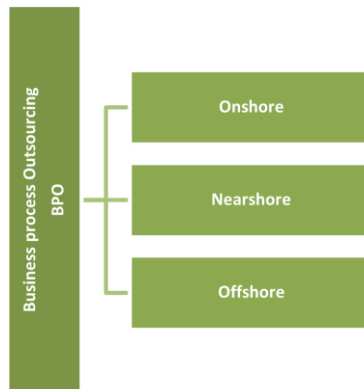


Figure 2. Possible types of Business Process Outsourcing (BPO) for companies

Source: Author’s design and research, 2023

The main company of the headquarters may decide about the type of outsourcing that suits better its business, services, activities and operations. If the company decides to transform from domestic to multinational, it has to focus on either near outsourcing or offshore operations. However, if it doesn't it remains domestic may follow the business model of onshore Business Process Outsourcing if it does not have a strong brand or competitive operations to compete with and present abroad in other locations for competitive values and advantages to its business and services. (See figures 1, 2, 3 and 4).

All types of outsourcing and subcontracting are possible for business values and competitive advantages, by following them the domestic or multinational company may possibly raise its reputation and reposition its existence in international markets abroad or near its territory in case of relevance to its main tasks and activities. (See figures 1, 2, 3 and 4).

Business and the possible outsourcing restrictions

According to this research Subcontracting cannot cover all of the same or similar activities carried out in the company.

- It must be justified by its specialized nature.
- It may not include equal or similar tasks to those performed by the rest of the workers at the contractor's service.

Figure 3 illustrates the outsourced and managed services usage plans globally by function in 2019. We observe that for finance and accounting embed significant automation has the highest percentage with nearly 36% followed by the change in provider or insource with 34%. While for human resources both were with 45% but there was a low percentage 14% for insource without automation. For industry specific, customer service, sales support and IT outsourced focused more on the change provider or insource as outsourced managed services usage plans with a percentage of 51% in customer service and 52% in IT the highest there were a change provider with high percentage followed by embed significant automation and then insource without automation. (See figure 3).

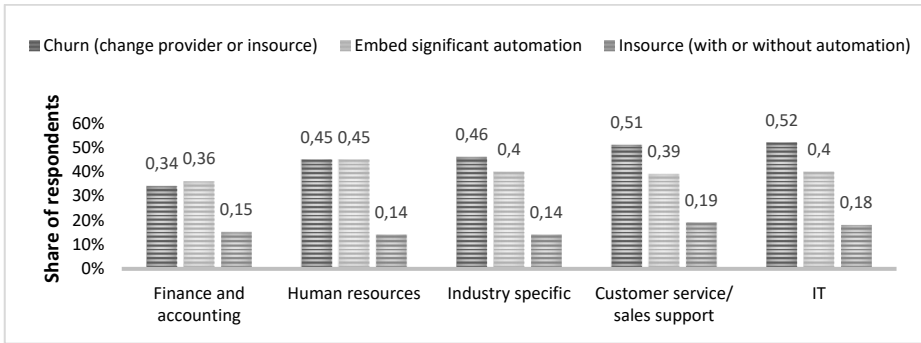


Figure 3. Outsourced and managed services usage plans worldwide by function 2019
Source: Author's contribution, Statista data (2023)

Internationalization and the main reasons and goals of multinational companies for International Business activities

Generally, when companies decide to start expanding at a global or international level, they logically have to expand in other countries to take advantage of the advantages of low cost or the differentiation that allows them to expand their profitability, but in order for them to carry this out, it is very important to have an internationalization strategy.

Internationalization allows companies to achieve at least a competitive advantage to increase their presence in the international market, therefore it is important that they are well designed and since based on this the company will be able to enter new markets to increase values or profit, the number of its customers and sales. Through internationalization, the company can introduce products or services to other countries that do not have them yet or do not have them at all. A multinational company is a company that operates in several countries where it may have factories, offices or points of sale and normally there is a country in which it may begins operations and we can call that company a parent or main company and the rest in other countries where the multinational has been established and extended over time will be called subsidiaries or affiliates. (See figure 4).

According to this research there are various reasons for business internationalization through multinational companies since it is an important strategy for international business opportunities and values. Companies choose to go multinational to skip the narrow market in the domestic or home country and by extending their business abroad they may be able to control the distribution between the areas of their subsidiaries and even

between them and the neighboring areas. When companies go multinational; they skip somehow the barriers of similarity in the home country and through this strategy they may reduce the production costs. Furthermore, one of the main reasons for the multinational strategy is skipping competition in the home country and financial difficulties. (See figure 4).

However, going multinational needs to be based on some goals and some of them could be Exports between the subsidiaries and even for other countries in the shape of transformation from domestic to multinational. This way, the company may reposition itself and extend its reputation abroad. Moreover, multinational companies are famous as well with the possibility of foreign direct investments (FDIs) and other business internationalization processes such as outsourcing with its three types and licensing for business values. (See figures 2 and 4).

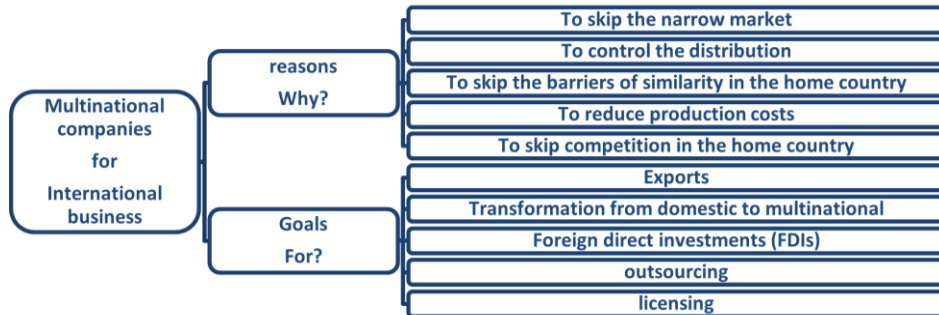


Figure 4. Multinational companies' business as an Internationalization strategy: reasons and goals

Source: Author's design and research, 2023

Figure 5 illustrates the Human resources shared services outsourcing by organizations globally in 2019 with a comparison between small, medium and large companies. We observe that the highest share of services is for employees onshore with 80% in Small companies, 82% in medium companies and 67% in large companies. (See figure 5). Followed by Hybrid services with the highest share and percentage with approximately 20% in large companies globally and 16% in medium companies and only 10% in small companies. As for employees offshore it was highly observed only in large companies in 2019 globally with 10%. Whereas small companies were characterized in 2019 globally with a small percentage of outsourced single third parties 6% compared 3% in large companies. As for outsourced multiple third parties it was observed only with 1% in small companies compared to 0% in both medium and large companies worldwide. (See figures 2 and 5).

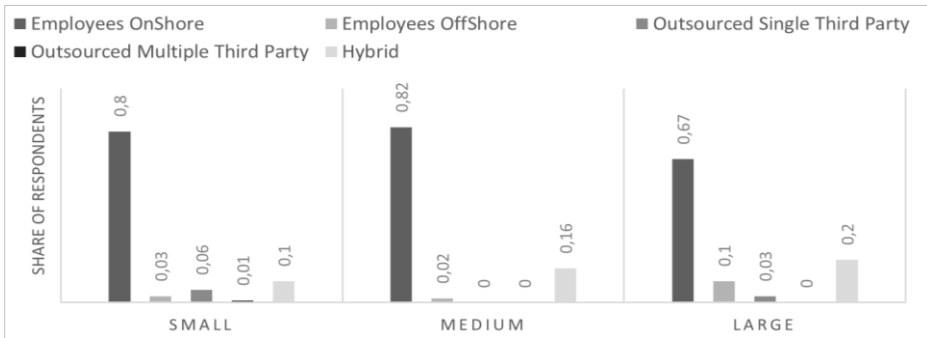


Figure 5. HR shared services outsourcing by organizations globally in 2019

Source: Author's contribution, Statista data (2023)

Figure 6 illustrates the global turnover and revenue of the outsourced customer experience market the period (2015-2020). From the figure we observe that there was an increase from 66.1 billion US dollars to 82.6 billion US dollars, and the difference between the years was not big. The thing that makes sure that globally the outsourced customer experience market witnessed somehow a period of success since the revenue globally was increasing. (See figure 6).

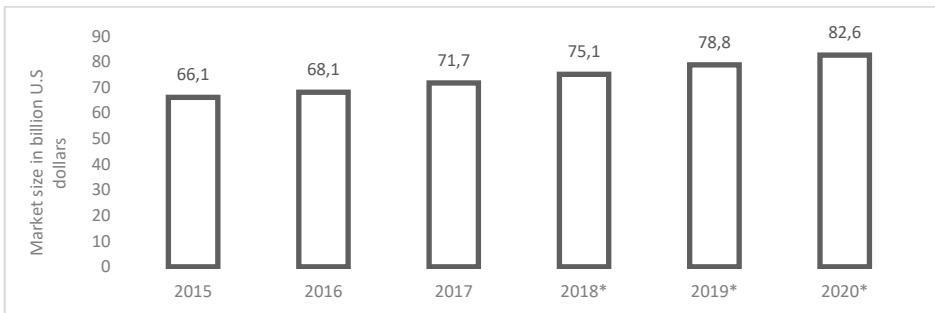


Figure 6. Global turnover of outsourced customer experience market from 2015 to 2020* (in billion U.S. dollars)

Source: Author's contribution, Statista data (2023)

Since 2017, most of the annual revenue of Tata Consultancy Services (TCS) were generated in the banking, financial services, and insurance industry. Banking, financial services and insurance have remained high if we compare 39% in 2017 and 38% in 2023 these outsourced services made up almost 40 % of Tata Consultancy Services' revenue in 2023. (See figure 7). The other outsourced services such as communication, media and technology have remained with approximately a similar percentage if we compare

2017 (17%) and 2023 (17%). The percentage manufacturing, retail and consumer business have remained slightly the same between the years of the period 2017 and 2023. Whereas, outsourced life science and healthcare were observed only in the period between 2021 with 10% and 2023 with 11%, this is probably due to the risk of the pandemic provoked by Covid-19 this type business process outsourcing started to appear. (See figure 7).

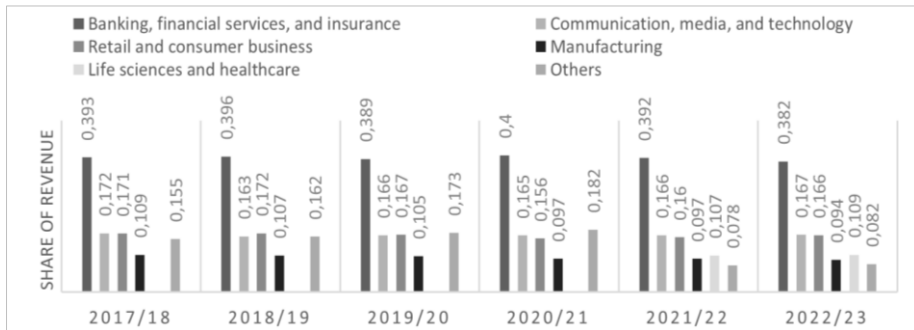


Figure 7. Tata Consultancy Services (TCS) revenue share, by industry vertical 2017-2023

Source: Author’s contribution, Statista data (2023)

If we take the period of 2020 globally by region, we observe in figure 8 that illustrates the share of the outsourced facility management market globally that North America was in the lead with 27% followed by Europe with 21% then central Europe with 17%. While, Asia and North Europe with the same percentage of 10%. From figure 8 and the available data in the mentioned source, we may observe as well that the share of the global outsourced facility management market in 2020 was low for Latin America and Easter Europe with 4% each and the lowest was in Africa and the Middle-East with only 2% (See figure 8).

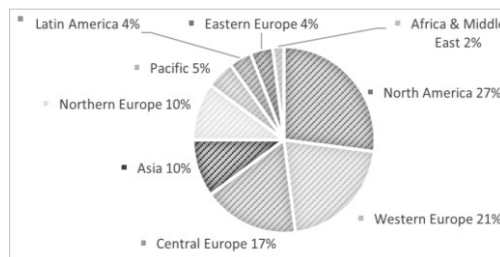


Figure 8 Share of the global outsourced facility management market as of 2020, by region

Source: Author’s contribution, Statista data (2023)

Conclusions

In conclusion, despite the spectacular drop in the cost of information, outsourcing is not a sure-fire winning strategy. But it is clear that it has become a central element of contemporary business models with a number of companies seeking to outsource variable costs as much as possible, to establish market relationships with subcontractors and to concentrate on design and management of the value chain. BPO is relevant for both domestic and multinational companies but some features and restrictions may be possible during the process, restrictions, strengths, weaknesses and risks that may should be taken into consideration by the company that would like to operate as multinational or remain domestic. As internationalization needs some parameters, with some attention the OLI model may be applied as well, but the company before using this model should do some research about the market and follow what we call information assumption. Business Process Outsourcing is an applicable modality towards internationalization but a resilience plan should be moderated and managed within the process to mitigate the risks that could harm the business values, focusing on the location is important as well.

Internationalization allows companies to achieve and reach a competitive advantage to increase their presence in the international market, therefore it is important that they are well designed and since based on this the company will be able to enter new markets to increase value. or profit, the number of your customers and your sales. Through internationalization, the company can introduce products or services to other countries that do not yet have them or do not have them. A multinational company is a company that operates in several countries where it may have factories, offices or points of sale and normally there is a country where it begins operations and we can call that company a parent company and the rest of the countries where the multinational has been established and extended over time will be called subsidiaries.

BPO has become a common contemporary business model with a number of companies seeking to outsource variable costs as much as possible, to establish market relationships with subcontractors and to focus on design and management of the value chain for business values but a resilience plan to mitigate risks during BPO and internationalization is very important.

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The challenges facing rural population and the potential of sustainability of rural development in Morocco

Zouhair Samir¹ – Pappné Vancsó Judit²

Abstract: Morocco, the fifth-largest economy in Africa, similar to its neighboring developing countries, its rural development is still a work in progress. However, during the last decade, the country has successfully reduced rural poverty and many other aspects relating to the physical and social infrastructures in these remote areas mainly by focusing on fostering agricultural development. The paper provided an overview of rural development and its potential sustainability in Morocco, relying on the journal articles, as well as the available data and censuses provided by the government. The results were organized into the four main pillars of sustainability to explore and examine the challenges facing rural population and development from the sustainability aspect. The review concluded that in the last decades, the government has successfully elevated and stimulated rural development. However, many challenges still face sustainability, mainly the high illiteracy rate which makes it harder to implement sustainable practices, and the infrastructure that is not yet sufficient to foster this transition.

Keywords: *Sustainable development, rural areas, rural population, rural development, Morocco*

JEL Codes: *O10, Q01, O18*

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Absztrakt: Marokkó vidékfejlesztési lehetőségei és kihívásai a fenntarthatóság tükrében, különös tekintettel a vidéki társadalomra – Marokkóban a vidékfejlesztési folyamatoknak mérhető eredményei vannak. Annak ellenére azonban, hogy az országot Afrika ötödik legjobban teljesítő gazdaságaként tartjuk számon – a szomszédos fejlődő országokhoz hasonlóan – Marokkó rurális terei további fejlesztésre szorulnak. Az elmúlt évtizedben az ország sikeresen csökkentette a vidéki szegénységet és sok más vonatkozó – pl. infrastruktúrával kapcsolatos – indikátor esetén javulást mutatott, amelyet főként a mezőgazdaságban történt fejlesztések előmozdításával sikerült elérnie. Jelen tanulmány átfogó képet igyekszik nyújtani a marokkói vidékfejlesztés fenntarthatósági vonatkozásairól a rendelkezésre álló szakirodalom vizsgálatának alapján, valamint a témában releváns népszámlálási- és egyéb szekunder adatok elemzésével. A vizsgálat során a vidéki terrek fejlődése előtt álló kihívásokat igyekeztünk feltérképezni végig szemelőtt tartva a fenntarthatóság négy fő pillérét. Megállapítható, hogy az elmúlt évtizedekben a marokkói kormány sikeresen ösztönözte a vidékfejlesztést, a fenntarthatósággal kapcsolatban azonban továbbra is számos kihívás vár megoldásra. A gyakorlati megvalósítást elsősorban a magas írástudatlanság, illetve az infrastrukturális hiányosságok akadályozzák a rurális tereken.

Kulcsszavak: fenntartható fejlődés, rurális terrek, vidékfejlesztés, vidéki társadalom, Marokkó

JEL-kódok: O10, Q01, O18

Introduction, objectives

Developing economies – in which agricultural productivity plays a determinative role – may be particularly vulnerable to the effects of climate change. Based on the reports of the IPCC (IPCC, 2007, 2022) the currently unequal distribution of precipitation in the Mediterranean countries may become extreme in the future, so the frequently occurring drought during the vegetation period may be even more critical. In the case of Morocco, this issue is particularly problematic, since the proportion of employees in agriculture and the contribution of agriculture to GDP are quite high.

Since Morocco's agriculture is characterized by traditional patterns, a particularly important question is: which direction should be developed in the future? Can Morocco avoid resource-intensive industrial agricultural development and create a long-term sustainable agricultural structure – based on rural development – or not?

To achieve long-term sustainability, it is crucial to establish stable economic and social frameworks that align with environmental conservation. This requires addressing a supportive political environment is essential to enact policies and regulations that promote sustainability. A stable and flexible society can face successfully the impact of climate change. A well-organized society can receive and share information in time, has collective knowledge and memory, has appropriate adaptation capacity, able to reorganize itself from time to time. We try to measure the extent to which the Moroccan rural socioeconomic position meets these requirements.

There is no denying the fact that sustainable development is the key factor for climate adaptation and mitigation (Visseren-Hamakers, 2020). Therefore, Morocco has considered mainly sustainability a path for its development in rural areas in its primary sector, agriculture first via the Green Morocco Plan (2008-2020), followed by the Green Generation Strategy (2020-2030) (Elalaoui et al., 2021). The overall objectives of the review were to explore and examine the challenges facing the rural population and rural development in Morocco by investigating the social and physical infrastructures in rural areas, the rural population challenges from a sustainability point of view, and the relevance of more effort for environmental dimension in rural development. In addition to studying the past trends of rural development strategies with an emphasis on the current situation. The review also discussed Morocco's potential to promote sustainable rural development. Specifically, the study aimed to address the following research questions: What are the past trends and prospects for rural development strategies and rural population situation in Morocco? What are the challenges facing the population, emphasizing the socioeconomics aspect in rural areas? What are the challenges facing the transition to sustainable rural development? What are the applied and required adaptation actions, policies, and measures for rural prosperity?

Explaining the issue and relevant literature

In Africa, the population of its developing countries remains largely rural. Agriculture also constitutes one of the most prominent economic activities providing employment to a large population in rural areas. As rural areas are commonly defined either as areas that are not urban areas that usually vary in socioeconomic, institutional, sociocultural, and environment, or as

areas with low population density and depend for the most part on the primary sector (Atkinson, 2017; Chromý et al., 2011; Straka & Tuzová, 2016). At a more general level, the World Bank defined rural development as a strategy aimed at improving the economic and social life of a particular group of people, especially the rural poor (Chambers, 2013; Straka & Tuzová, 2016). Many factors can characterize rural development. For instance, rural development by Moseley (2003:4) is described as a sustained and sustainable economic, social, cultural, and environmental change aimed at improving the long-term well-being of the entire community (Moseley, 2003). Since rural areas are significantly impacted by climate change, the transition to sustainable solutions is a must to cope with current and future scenarios. As sustainable development is considered the key to climate change adaptation and mitigation. To achieve sustainable development under the current circumstances, rural development perspectives must consider several aspects such as quality-of-life improvement, reduced inequalities, rural resilience, sustainable agriculture, and circular economy (Atkinson & Atkinson, 2023; El Chami et al., 2020; Visseren-Hamakers, 2020). In terms of sustainable rural development concept, as it is underpinned by four basic pillars which are social, economic, political, and environmental. it is defined as a holistic approach where the day-to-day basic needs of rural populations are met through reliable public utilities in combination with technical, socio-economic, and environmental conditions to sustain regional economies, the links between urban and rural regions, and to improve resilience to economic shocks and environmental disruptions as a result of climate change (Mihai & Iatu, 2020).

Agriculture has been historically considered the main activity in rural areas. The vulnerability of the rural population to climate variability lies also in their dependence on agriculture. Since the temperatures will increase by about 1–1.5°C by 2050 (Dwivedi et al., 2022), higher temperatures will eventually reduce yields of desirable crops while encouraging weed and pest proliferation (Adeyinka et al., 2022). Developing countries are considered to be more vulnerable to climate change because of their reliance on low-capital agriculture with limited financial capacity (Lybbert & Sumner, 2012). In developing countries, Poor smallholder farmers are more exposed to climate risk due to their lack of adequate adaptive capacity (Archer et al., 2007). Nevertheless, in recent years, more developing countries have opted for sustainable agriculture (López-Sánchez et al., 2021). Sustainability in agricultural systems has improved food production and reduced food poverty in over fifty developing countries in

Africa, Asia, and Latin America by adopting low-cost, and locally available environmentally sensitive practices and technologies (Pretty et al., 2003). Sustainable agriculture is defined as an integrated system of plant and animal production practices that produce adequate amounts of high-quality food, protect its resources, and be both environmentally safe and profitable (Velten et al., 2015). In Morocco, agricultural development plans were among the first governmental plans to incorporate the transition to development, which implements and fosters sustainable practices in rural areas that are conducive to a thriving economy for its rural communities. As farming and related activities form the basis of rural life. The state has stimulated rural areas' economy mainly through investing in agricultural development and participating in international collaborative plans, including presenting the Initiative for the Adaptation of African Agriculture to Climate Change (AAA Initiative) in the run-up to COP 22 (2016) (The World Bank et al., 2018).

The paper conducted an overview of the challenges facing the rural population and development-related opportunities and challenges in Morocco, resulting in an exploratory review of rural development's current state and potential for sustainable development in rural areas. To address the mentioned research questions, the existing literature had to be relied upon to provide a comparative analysis of the past and current trends, as well as the evolution of rural development and the relevance of the transition to sustainability in Morocco. In addition, under the context of the significance of sustainability in rural development, the results were organized under three main subchapters: economic, social, environmental and political dimensions. Furthermore, it should be mentioned that the literature examined comes from three different languages: English, French, and Arabic.

Methodology, data sources

The main theoretical contribution of this work is to explore the productivity, sustainability, challenges, and opportunities at a qualitative and quantitative exploratory level regarding rural development, focusing on the challenges for sustainable rural development. Regarding the methodological approach used to examine the previous studies, this paper can be classified as a narrative review. Selected previous studies and findings are contrasted, summarized, and organized under three main subchapters to

provide a clear view of the state of rural areas in terms of development and sustainability challenges in the light of changes, past and current trends. The data source was derived from various data sources. Academic journal articles related to this research area that are included in this paper come from a variety of sources and web search engines such as Google Scholar, Scopus, and ScienceDirect. Including scientific papers deemed to provide clarity and a new perspective on the tackled topic. Given the nature of the topic, it was necessary to rely not only on the scientific articles that were published on the topic, but also, on official documents and reports that were released by different renowned sources such as the World Bank Group, the Organization for Economic Co-operation and Development (OECD), Food and Agriculture Organization (FAO), and World Resources Institute (WRI). In addition, the official documents, reports, and censuses issued by the state and government institutions were mainly included for their relevant information and statistical data to understand the current and past trends in sustainable rural development prospects. Another reason is the government's political view for a better understanding of the topic. The article relied on basic statistical descriptive methods such as percentages to clarify and simplify the data, for a better understanding of the issues discussed. The inability and/or difficulty accessing reliable and updated secondary data has been the main obstacle faced during this work.

Description, findings

Morocco is generally considered a country undergoing demographic, economic, and political transformation. To examine the challenges facing rural population and development from the sustainability aspect. It was necessary to investigate the fundamental pillars underpinning sustainable rural development. The explored sustainable rural development aspects are deemed to bring clarity to the current situation in rural areas of Morocco, rural development, and its sustainability. The economic dimension focused on the main economic activity in rural areas and the physical infrastructure to foster potential sustainable rural development plans. The social dimension was interested mainly in the social infrastructure, essentially education, poverty, and health coverage challenges, including essential equipment availability, and discussing the specificities of the nomadic

population in Morocco. Additionally, the work also explored the environmental and political dimensions. In the following, the results of the sustainable rural development review were organized into four basic pillars: economic, social, environmental and political dimensions.

Economic dimension

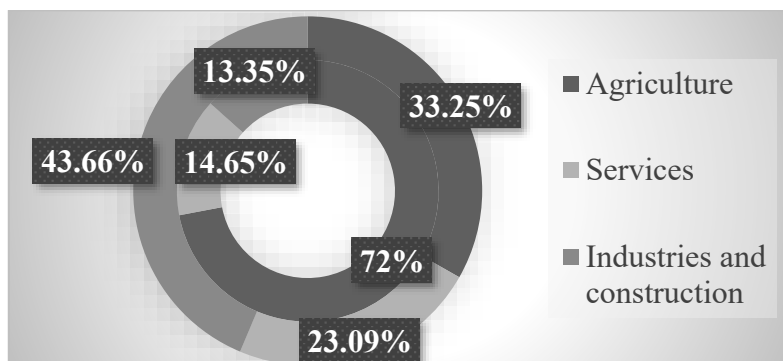


Figure 1: Structure of rural employment by sector of activity (%) (2019-2021) (national on the outside, rural on the inside)

Sources:(MAFM, 2021; MEFM, 2019)

Morocco, the third-largest agri-food exporter in Africa, still depends to a disproportionate degree on agriculture (Amiri et al., 2021). The sector accounts for 13% of the total GDP and represents about 35% of all employment with 72% of rural employment (MAFM, 2021), where the majority of the rural population still depends on agriculture for their livelihood. In addition, smallholders represent 70% of farms in Morocco, and close to 10 million people are involved, to varying degrees, in agricultural activities (MEFM, 2019). As agriculture is considered the primary economic activity in rural areas by figures in Morocco. The economic dimension of sustainable rural development cannot be achieved without the sustainability of agriculture in Morocco. In addition, the sustainability of this sector will boost the case to include sustainability in future rural development plans. The agriculture development strategy in Morocco, mainly through the Green Morocco Plan (2008-2020), followed by the Green Generation Strategy (2020-2030), was successful since the GDP from agriculture's average annual rate of growth has doubled reaching +5.25% (2008-2018) compared to the previous decade +2.5% (1997-2007) (MAFM, 2021).

And was achieved primarily by fostering the development of modern agriculture with high productivity and added value in the irrigated and relatively prosperous unirrigated areas, that meet the market requirement, through private investment (Akesbi, 2012). And secondly, by providing support to small-scale agriculture and improving the incomes of the most vulnerable farmers, particularly in landlocked areas (El Hassane et al., 2015; HCPM, 2020; Mengoub et al., 2021). However, climate variability substantially impacts this development. For instance, both 2020 and 2022 harvests are among the lowest recorded in the last 20 years as they were characterized by poor rainfall, in terms of amount and distribution. The cereal production of these two years was about 60 percent short of the previous five-year average and 38% to 70% below the prior year's harvest. In comparison, the 2021 cereal production was higher than the five-year average by over 60 percent. The season was characterized by a favorable rainfall, the precipitations were adequately distributed over time and space to facilitate sowing and early crop development (FAO, 2021, 2022).

Regarding gender equality and women's empowerment, based on the figures provided by the OECD, women's employment stands at 52.2% in the agriculture sector, mostly in low-wage job positions, which is the highest compared to the rest of the Mediterranean countries. The participation of women in the Moroccan labor market stands at 21.3% and is concentrated in the agricultural and industrial sectors. One of the explanations for the current situation is the fact that women's illiteracy rate is the highest in the country by gender. Additionally, about 17% of women in non-agricultural employment work informally. Gender equality in terms of access to education will help shift the current situation and boost economic development including in the agriculture sector (OECD, 2020, 2021). The mentioned facts constitute the main challenges for sustainable agriculture and the economic dimension of sustainable rural development that depends largely on the sustainability of the agricultural sector in Morocco.

In terms of physical infrastructure that would support sustainable development in rural areas. Thanks to the development of rural roads plans launched in the last decades, the rural roads accessibility rate increased from 34% in 1995 to 85% by the end of 2017. The government aims to reach 90% of the accessibility to rural roads by 2023 via the Program to Reduce Territorial and Social Disparities launched in 2017 (HCPM, 2018c, 2023). The electrification rate in rural areas is about 84.6%, close to the accessibility rate in urban areas of 95.2% in 2014. The country achieved an electrification rate of 91.6% (2014) (HCPM, 2018c, 2023).

Regarding the accessibility rate to the public water supply system in Morocco is approximately 73% (2014). However, it is tremendously low in rural areas (37.8%) compared to urban areas, which reached 91.3% (2014) (HCPM, 2018c, 2023). The drainage lines accessibility rate in Morocco stood at 58.9% nationwide and 88.2% in urban areas (2014). However, it is pretty low in rural areas, with only a 2.9% accessibility rate (2014) (HCPM, 2018c, 2023).

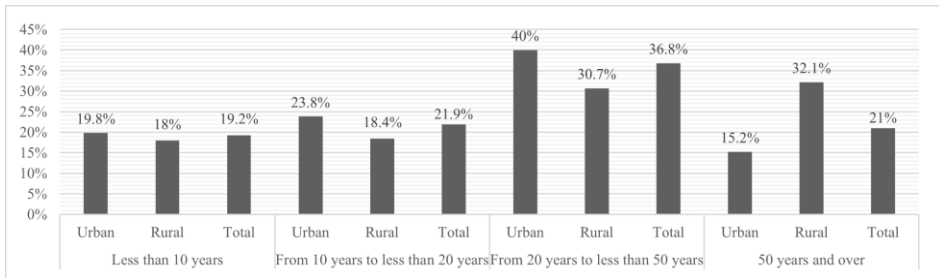


Figure 2: Household distribution by the age of housing in percentage (2014)
Sources : (HCPM, 2023; MNTP, 2019)

In terms of housing, the graph demonstrates that the rural population has the highest rate regarding the age of housing. In rural areas, 32% of housing is aged 50 years or over, making it less suitable for a living if it is not maintained correctly (HCPM, 2023; MNTP, 2019). As for ownership in rural regions is much higher than in urban regions (89.6% compared to 62.7% in 2014) (HCPM, 2018a, 2018b, 2018c, 2023). The rural population in Morocco tends to live in villages close to their extended family, sometimes in a large household located on the farmland where they collectively work and maintain the same agricultural land. In rural areas, houses are mostly traditionally built however, the newly built houses in rural areas tend to rely on more modern methods. The current physical infrastructure is not robust enough to facilitate the transition to sustainable rural development, as it was further demonstrated in the recent earthquake that hit the country on the eighth of September 2023, where a catastrophic number of the rural population died in the collapse of their traditionally built houses and the lack of emergency facilities located and provided for these areas (HCPM, 2018a, 2018b, 2018c, 2023).

Social dimension

Rural development is significant in Morocco since over one-third of the population lives in rural areas (39.63% of the total population resides in rural areas), which prompted the government and the institutions to invest in development projects and plans in these areas. Since the independence of Morocco, six population censuses have been conducted in 1960, 1971, 1982, 1994, and 2004, and the last census was in 2014. The population of Morocco is distributed into 1538 communes, which constitute the unit of local governments for administrative purposes. Moroccan communes comprise 256 urban and 1282 rural. In addition, the size of a commune varies between 55 and 520,428 people. The five main economic regions comprise about three-quarters of Morocco's total households. At the national level, the average household size decreased from 5.2 in 2004 to 4.6 in 2014, with an average annual growth rate of 2.59% in the number of households. The average household size was much higher in rural areas, with 5.3 in 2014 (6 in 2004), compared to urban areas, with just 4.2 in 2014 (4.8 in 2004). However, the average annual growth rate in the number of households in urban areas stood at 3.4% compared to rural areas, with only 1.2%. (HCPM, 2018a, 2018b, 2018c, 2021, 2023). The review tackled the following aspects: Illiteracy, poverty, healthcare, essential equipment availability, and the nomadic population in Morocco.

**Table 1: Illiteracy rates based on sex and place of residence
(Population aged 10+) (%)**

	Urban			Rural			Total		
	Women	Men	Total	Women	Men	Total	Women	Men	Total
1960			73%			91%	96%	78%	87%
1971	68%	43%	56%	98%	78%	88%	87%	66%	76%
1982			44%			82%	78%	51%	65%
1994	48.6%	24.7%	37%	89.1%	60.6%	75%	67.4%	41.4%	54.7%
2004	39.5%	18.8%	29.4%	74.5%	46%	60.5%	54.7%	30.8%	43%
2014	31%	14%	27.7%	60.1%	34.9%	50.9%	42.1%	22.2%	36.9%

Source: (Courbage, 1996; HCPM, 2018a, 2018b, 2018c, 2023; Robert Fosset, 1973)

The illiteracy rate in Morocco reached 32.2% based on the official figures of the last census of 2014. However, the illiteracy rate stood at 36.9% nationwide if people who didn't graduate from primary school (which is for children between the age of seven and thirteen) are considered. Rural areas have the highest illiteracy rate in the country reaching 50.9% (2014). In Addition, It is noteworthy to underline that, under law No. 1-63-071 (1963) education is compulsory for all Moroccans of both sexes (since 1963), from the age of seven until they reach the age of thirteen (HCPM, 2018a, 2018b, 2018c).

The table developed from the figures available from the government census results shows that the illiteracy rate is much higher in rural areas than in urban regions for both genders. For instance, the men illiteracy rate in rural areas was 34.9% in the last census, almost double and a half compared to 14% in urban regions for the same year. The same observation can be made for rural women (60.1% in 2014) compared to their urban counterparts (31% in 2014). The limited access to the institutions such as schools in rural areas could explain this disparity. Furthermore, the women's illiteracy rate is the highest, regardless of the place of residence. However, based on the previous censuses, the illiteracy rate is substantially decreasing, from 91% recorded sixty years ago to 50.9% in 2014 for rural areas. In addition, thanks to the various school social support programs and initiatives the enrolment rate in the rural areas reached before the pandemic in 2020, 47,4% for Preschool (between the age 4 to 7 years old), for primary school enrolment rate reached over 90% (between 7 to 13 years old), in middle school enrolment rate is 44,3% (between 13 to 16 years old) and 12,2% in High school (HCPM, 2022). Given the mentioned figures, illiteracy in rural areas is expected to decrease further in the current decade.

Poverty in Morocco has also substantially decreased in the last decade, thanks to the significant part of the development achieved via agriculture for rural farmers through the Green Morocco Plan (2008-2020), followed by the Green Generation Strategy (2020-2030). In rural areas, absolute poverty has reduced by over 5% between 2013 and 2019. However, absolute poverty has risen during the pandemic from 1.7% to 11.7% nationwide, from 0.5% to 7.1% in urban areas, and from 3.9% to 19.8% in rural areas. In terms of relative poverty, it constitutes 12.7% nationally, 6.8% in urban areas, and 22.9% in rural areas, reaching 4.5 million people, with two-thirds (66.4%) living in rural areas (2019) (HCPM, 2022). In 2019,

rural populations' vulnerability to poverty declined to 11.9%. During the lockdown, vulnerability to poverty has also increased from 7.3% to 16.7% nationally. Depending on the residence, these proportions range from 4.6% before the lockdown to 14.6% in urban areas and 11.9% to 20.2% in rural areas. Social inequalities also deteriorated and exceeded the socially intolerable threshold (42%). The Gini index reached 44.4%, corresponding with a high-income disparity, compared to 38.5% before the health crisis (HCPM, 2021, 2022). However, government support has mitigated the impacts of the Covid-19 pandemic. Public support for households has significantly reduced the effects of the lockdown on household living standards. At the national level, absolute poverty has decreased from 11.7% to 2.5% after government support. In urban areas, 7.1% to 1.4%, and 19.8% to 4.5% in rural areas. The Gini index, the most widely used measure of income inequality in a society, dropped from 44.4% before government support to 38.4%, about the same level as before the pandemic (HCPM, 2022).

Table 2: The rate of health coverage of the population (%)

	1991	1998	2001	2007	2014
Urban	23,7%	21,8%	21,1%	25%	44,5%
Rural	3,1%	3,8%	3,8%	3,8%	23,7%
Total	12,8%	13,5%	13,5%	15,8%	36,2%

Sources:(HCPM, 2018a, 2021)

The table shows that health coverage in rural areas tremendously improved in 2014 compared to the previous years. This improvement resulted from the RAMEd program's implementation in 2011, which targets economically deprived people not covered by any health insurance scheme (HCPM, 2018a, 2021, 2022).

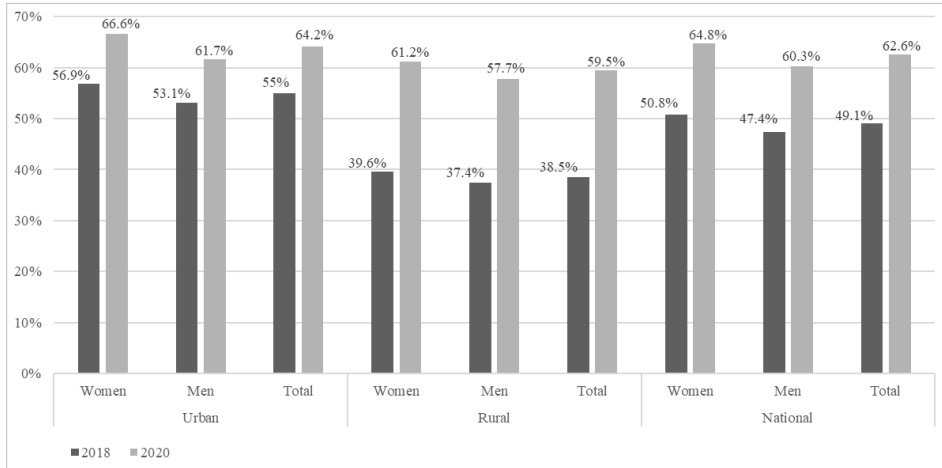


Figure 3: The coverage rate of the population aged 15 and over by health insurance (AMO and RAMED) (%)

Sources:(HCPM, 2021, 2022)

AMO is compulsory health insurance for Moroccan employees, paid by both employers and employees as a percentage of salary. The graph shows that health insurance coverage in rural areas reached about 60% of the total population aged 15 and over in 2020. In addition, women's health coverage in 2020 was 61.2% compared with 57.7% for men in rural areas (HCPM, 2021, 2022). In terms of maternal mortality in Morocco, it is perceived as 2.5 times higher in rural areas than in urban areas. As maternal mortality ratio stood at 72.6 per 100,000 live births for the period 2015-2016 nationwide. In rural areas, it constitutes 111.1/100,000 live births compared to 44.6/100,000 live births in urban areas. Nevertheless, maternal mortality decreased by 35% during the 2010 to 2016 period, with an average annual reduction rate of 7% (MHM, 2018).

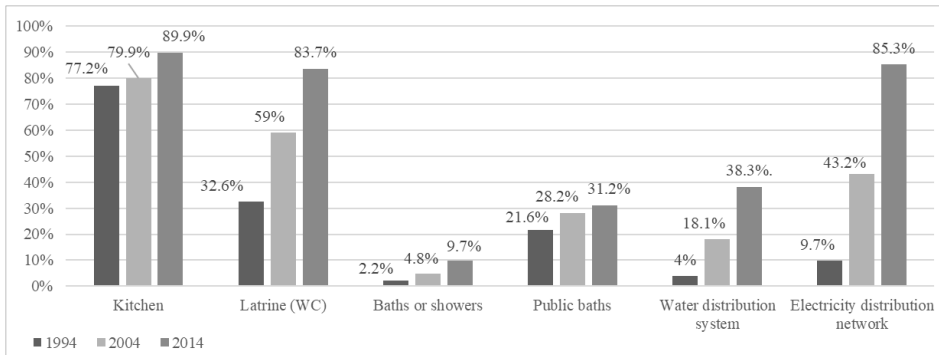


Figure 4: Structure of households according to essential equipment availability in rural areas (%)

Sources: (HCPM, 2023; MNTP, 2019)

The graph shows that the electricity availability for households in rural areas has significantly increased in the last decades, from 9.7% in 1994 to 85.3% in the last census of 2014. In terms of latrine (WC) availability, it has improved considerably from 32.6% in 1994 to 83.7% in 2014. In addition, households in rural areas had always possessed available kitchens as essential equipment for their daily life. However, the availability of baths, showers, and public baths in rural areas is rather limited. Additionally, water availability for households in rural areas is still low, reaching 38.3% in the last census.

The Moroccan Nomads:

The nomadic population constitutes a small minority in Morocco. It is characterized by the practice of animal husbandry and frequent movements motivated by the search for grazing areas and water points. The number of nomads on 1 September 2014 was 25,274 compared to 68,540 in 2004, representing a 63% decrease. 95% of the nomadic population is concentrated in four regions, all in the east and south of the country. Some of these regions are considered the least developed part of the nation. In terms of households, the number of nomadic households stood at 4044. The family structure of this population is still dominated by large households, which corresponds to an average size of 6.2 compared to 4.6 at the national level. Approximately 68.2% of nomadic households composed of five or more persons (32.8% are consist of at least eight people), 10.6% are composed of four individuals, 8.1% consist of three persons, 7.1% of

two persons, and only 6.1% was made up of one individual. However, the average fertility rate per nomadic woman decreased from 4.3 in 2004 to 4 in 2014. Despite this slight decline, this index was almost double the observed nationwide (2.2 children per woman) in 2014. The nomadic population is predominantly young. 36.0% of the population is under the age of 15 compared to 28% of the total population in Morocco. About 47.5% are under 20, and 65.5% are under 30. Nomads are more active than the entire population. Their employment rate reached 56.8% as opposed to 47.6% at the national level. In terms of unemployment, nomads are less exposed than the general population. Their unemployment rate stood at 10.1% (16.2% at the national level), 8.6% for men (12.4% nationwide), and 16.7% for women (29.6% nationally) in 2014. This difference could be explained by the fact that most nomads work and inherit the traditional jobs of their families. Illiteracy among the nomadic population is relatively high. Its illiteracy rate stood at 81.9% compared to 32.2% nationally. 89.5% of nomadic women are illiterate compared to 74.9% of nomadic men. Similarly, the educational level of the nomadic population remains very low. 84% of nomads have no level of education, 2.2% have attended preschool at most, 9.3% elementary school, 2.7% junior high schools, high school and higher education were only 1.2% and 0.6% respectively in 2014. Access to education among nomadic children is still minimal. The enrolment rate for children aged 7 to 12 is 31.3% (94.5% nationally), 39.8% among nomads boys, but only 23.5% among nomads girls (HCPM, 2016, 2023).

Environmental and political dimensions

Sustainable rural development faces many challenges in Morocco. The review discussed in the following subchapter the political and environmental aspects related to sustainability in rural areas, mainly via exploring the methods of wastewater disposal and investigating the practices of household waste disposal in Morocco. The paper relied on the latest available data from the conducted censuses from 2004 and 2014. Lastly, the review also discussed the incentives and factors that could foster the transition to sustainable rural development.

Methods of wastewater disposal	2004			2014		
	Urban	Rural	Total	Urban	Rural	Total
Public sewage system	79%	1.8%	48.6%	88.2%	2.8%	59%
Septic Tank	11%	36.5%	21%	9.6%	49.2%	23.2%
Drywell	3.1%	18.9%	9.3%	1.3%	21.3%	8.2%
In nature	6.9%	42.8%	21.1%	0.6%	25.7%	9.2%
Others				0.3%	1%	0.4%

Table 3: Distribution of households according to wastewater disposal methods in Morocco (%)

Source :(HCPM, 2023; MNTP, 2019)

The table demonstrates the disparity between rural and urban areas regarding the different wastewater disposal methods. Urban areas mostly use public sewage systems for wastewater disposal (from 79% in 2004 to 88.2% in the last census) compared to rural areas which could be explained by the limited access to this method. In terms of the adoption of the septic tank method, it is increasingly popular in rural areas (from 36.5% in 2004 to 49.2% in 2014). The use of dry wells is slightly increasing in rural areas (from 18.9% to 21.3%). Concerning wastewater disposal in nature, it was decreasing rapidly in urban areas from 6.9% in 2004 to 0.6% in 2014. However, although wastewater disposal in rural areas has also dropped from 42.8% to 25.7% in 2014, more is needed to protect and sustain the environmental aspect in rural areas.

	2016	2017	2018	2019	2020	2021	2022
The normal capacity of dams (Mm3)	15,212.2	15,212.2	15,137.3	15,597.0	15,597.2	16,122.6	16,122.6
Dams reserve (Mm3)	7,705.0	5,342.4	9,499.9	7,272.1	5,666.2	5,555.2	4,121.7
Filling rate (%)	50.65%	35.12%	62.76%	46.62%	36.33%	34.46%	25.56%

Table 4. Morocco's main dams filling rate as of December 14 (2016-2022)

Source: (MEWM, 2023)

The wise use of water in the Moroccan context is quite relevant. As agriculture relies heavily on natural resources and is increasingly subject to water risks. The strong decline in rainfall experienced since 1980 in Morocco (-15% to -20%) with a decrease in river runoff (-30% to -40%) is

putting increased pressure on agriculture (Hadria et al., 2019; WBG, 2017). In addition, the experienced rain deficits since 2015 are affecting water resource availability in the country with dwindling groundwater reserves (Luo et al., 2015; WBG, 2017). The groundwater is extracted well beyond the level of sustainable abstraction. In this regard, the WRI has categorized Morocco as a country with high water stress in 2010 and extremely high water stress in 2040 (Luo et al., 2015). The impact has already been perceived, since over the last seven years the main dams filling rate have substantially decreased. This requires urgent action to address this issue, not only in the main relatively industrial cities but also in rural areas by raising the awareness of the rural population regarding this finite resource and fostering the adoption of sustainable practices to adapt to the current water shortages facing the country during the last and current decade. However, since 70% of farms are smallholders and are usually unable to implement new sustainable practices and technologies as a result of the high illiteracy rate, this further increases the vulnerability and marginalization of rural communities. Subsequently, affects the progress of rural development plans and the sustainability of the rural communities.

Disposal of household waste methods	Urban	Rural	Total
Common waste bins	67.7%	2.7%	45.5%
Common or private garbage truck	26.9%	5.9%	19.7%
In nature	4.8%	89.3%	33.6%
Others	0.6%	2.1%	1.2%

Table 5: Distribution of households according to waste disposal methods in Morocco (2014) (%)

Source :(HCPM, 2023; MNTP, 2019)

In terms of waste disposal methods used in the rural areas of the country, it is mainly disposed of in nature (about 89.3%) based on the latest available data from the government census, and only about 10 percent are disposed of through appropriate methods via common waste bins and common or private garbage truck facilities, which constitutes from a sustainability perspective one of the issues facing its environmental dimension. Based on the mentioned figures, we can also deduce that rural infrastructure is still a work in progress in order to support and foster sustainable rural development in future plans and increase the resiliency of rural communities.

Politically, the government focuses more on the economic dimension of rural development, specifically on agricultural development, than on the other dimensions of equal importance from the sustainability aspect. However, it reduced poverty in rural areas for a better standard of living, created job opportunities, supported rural youth entrepreneurship, and even slowly reduced the severity of the rural exodus that Morocco experienced in the last fifty years after its independence.

Despite the country's progress, there is still no clear integrative sustainable rural development model that applies to its specificities. Although the second component of the National Strategy for Development of Rural Space and Montagne Zones (NSDRSMZ) via the government's declaration of January 2012 concerns integrated and territorialized projects of an economic and environmental nature. The national strategy was essentially focused on the physical and social infrastructure of rural development, boosting agricultural development for economic purposes and reducing disparities via the Programme for the Reduction of Territorial and Social Disparities (PRTSD), which was launched in 2015 for the period 2017 – 2023, ignoring the environmental dimension that constitutes one of the basic pillars of sustainability in rural development (HCPM, 2023).

Certainly, at the national level, the government has made significant efforts to protect the environment, such as through the framework law on the National Charter of the Environment and Sustainable Development, which was based on the royal guidelines of July 30, 2011, and the implementation of the Environment Upgrade Strategy (EUS). The country also held the 7th rank in the Climate Change Performance Index (2023) and was ranked 70th with a score of 70.9, better compared to the previous year in the 2023 Sustainable Development Goals (SDGs) index assessing the progress towards achieving all 17 SDGs. In addition, Morocco participated in and hosted many international events and conferences relating to environmental protection and sustainability issues such as COP 7 on October 29, 2001, and COP 22 on November 7, 2016, at Marrakesh. Furthermore, the country is engaged and presented the voluntary national review on the implementation of the Sustainable Development Goals (SDG) in 2016 and 2020 provided to the United Nations Economic and Social Council. Nonetheless, in rural areas, most of the focus is still on improving the economic and social aspects, which is understandable from a developing country's position (Burck et al., 2022; HCPM, 2020, 2023; Sachs et al., 2023).

Despite the fact that rural development in the country is still a work in progress in order to be recognized as a sustainable one. Based on Morocco's commitment to climate change mitigation and adaptation through subscribing to the implementation of the Sustainable Development Goals Agenda 2030. It is likely that sustainable rural development will be considered and embodied in future strategies and development plans.

Discussion

The study provides insight into the past and current rural development and the challenges facing the rural population in Morocco from a sustainability lens. Morocco, as one of the major economies in the African continent, is considered to be at the crossroads of development whether to follow the traditional development path, which is often notorious for disregarding sustainability issues and resource depletion, such as what occurred in the industrial revolution periods or to benefit from the experience of other developed countries and forge a new path of development based on the fundamental concept of sustainability, taking into account all the dimensions required for a society to prosper and be suitable to the country's specificity.

Economically, rural areas have benefited from agriculture development plans implemented by the government in the last decades, which is considered to be the backbone of the economy in the country (Elalaoui et al., 2021). In addition, the government also improved the accessibility to rural roads, public water systems, and the electrification rate in rural areas. However, more effort remains to be implemented in order to keep promoting sustainable practices and fostering the adaptation of the sector regarding the current and future projected climate change scenarios. Rural areas are still facing several issues, such as the condition of rural houses, which in many cases do not meet the minimum safety standard requirements, the low drainage lines accessibility rate, and the gender disparity of rural women perceived in the rural labor market, as most women occupy low-wage job positions, in some cases informal ones, which can be attributed to the high illiteracy rate among rural women. The high illiteracy rate also affects rural development and hinders the implementation of new sustainable practices in the agricultural sector.

Socially, illiteracy in rural areas is still rampant, notably among Moroccan nomads. However, during the last years, the enrollment rate of the

rural population at school has significantly increased. Rural poverty has also decreased substantially, largely thanks to the agricultural development plans in the last decade. In addition to the significant improvement in terms of health coverage rate due to various programs that the rural population benefited from. The structure of households according to essential equipment availability in rural areas has undergone notable improvement over the past few decades.

On the environmental front, the government still needs to focus on providing infrastructure and raising awareness about environmental protection, as 89.3% of waste disposal and 25.7% of wastewater disposal are still dumped in nature. This will further exacerbate the water scarcity caused by the substantial decrease in water availability facing the country in recent years. However, it should be mentioned that the task is considered rather challenging due to the high illiteracy rate in rural areas.

Politically, Morocco, since its independence, has implemented various projects and governmental programs focused on stimulating the development of rural communities, often with the help of foreign aid such as the *Programme d'habitat rural* (1967–1972) of UN (United Nations) involved FAO, and The 2020 Strategy for Rural Development in cooperation with UNDP (United Nations Development Programme), FAO, and the World Bank Group in collaboration with Moroccan institutions, mainly the Ministry of Agriculture, Rural Development and Maritime Fisheries (FAO, 2006; Tenzon & Fisher, 2022). As the focus of national policies has shifted to rural development outcomes, decisively pro-poor, and development plans that include participatory approaches for intervention. The country has emerged as a suitable partner for international donors, and the empowered rural communities will facilitate the transition into a sustainable development model (Ben-Meir, 2019; Doherty, 2017). However, Rural areas in Morocco still face multiple challenges from different dimensions. One way to diversify female employment is to support further the associations that target this population in order to extend their impacts, where women can learn and improve valuable skills such as traditional crafts in the same time offering educational opportunities which will support addressing gaps in access to education, improved employment opportunities, and financial support possibilities for cooperatives and entrepreneurship as a step toward rural women's integration in development (Ennaji, 2008; Tribak & Rguig, 2021). For developing countries, such as Morocco, it would be crucial to improve agricultural and rural

development governance, to encourage communication development between the national, local, regional, and international actors both vertically and horizontally as well as fostering the participation of civil society organizations as a way to boost policy impacts and contribute to potential sustainable development in rural areas as well as adopting the latest sustainable development models, solutions, and practices to increase the adaptive capacity of the society as a whole (El Bilali et al., 2012).

Conclusions

The paper concluded that based on the previous and current Moroccan development trends. The government is well aware of the importance of the sustainability aspect, and it will likely be emphasized in future rural development plans. Sustainable rural development in Morocco will improve the quality of life of the rural population especially the marginalized ones by developing capacities that promote community participation, food security, health and education, sustainable economic prosperity, and environmental protection. Thus, enabling the rural population to achieve their potential and preventing depopulation of regions affected by rural exodus. Additionally, a successful transition to sustainable rural development in one North African country will foster the consideration of other neighboring countries for a sustainable development path. However, the current infrastructure of the rural areas in Morocco is not sufficient yet to support this transition.

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Declaration of interest statement

The authors declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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Agroforestry: an agroecological practice in the light of Ecological Economics

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Abstract: The purpose of this study is to contribute to the comprehension of the relationship between the concepts of agroforestry, agroecology, and ecological economics. The main concept I study in this paper is agroforestry, whose understanding requires the analysis of both its definitions and its relation to these other key concepts. I applied focused literature review, employing the scientific databases of ScienceDirect and Springer, as well as the Google Scholar search engine. I used relevant academic publications in English, Spanish, and Hungarian. Agroforestry manifests as a sustainable land-use practice, exhibiting myriad ecological, social, and economic advantages both at the level of individual farms and on a broader landscape scale while aligning with agroecological principles. The findings reveal a robust alignment of agroforestry and agroecology with the beliefs and assumptions of ecological economics. All three concepts underline the unsustainability of contemporary farming within a global economy constrained by ecological limits. Agroecology further emphasizes embeddedness in nature, socio-ecological interactions, and recognition of nature's intrinsic value. All three concepts genuinely apply trans-disciplinary approaches, while their shared commitment to systems thinking helps to understand complex human-environment interactions. Synergy between these concepts presents a promising avenue for fostering sustainable food systems amid global environmental challenges.

Keywords: *agroforestry, agroecology, ecological economics, agroecosystems, sustainable food systems*

JEL Codes *O13, Q15, Q56, Q57*

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Introduction

Agroforestry, characterized by the intentional integration of trees or shrubs with crops and/or livestock on the same land, offers a multifaceted strategy to optimize land use while enhancing ecological resilience. Simultaneously, agroecology, as a holistic and interdisciplinary approach, emphasizes the optimization of ecological processes within agricultural systems, fostering biodiversity, soil health, and overall sustainability.

A vast body of literature exists on the individual concepts of agroforestry and agroecology. However, the frequently inconsistent use of these terms creates confusion, and there is a scarcity of analysis regarding their relationship, similarities, and distinctions. I have basically two research questions. What is the relationship between the concepts of agroecology and agroforestry according to the literature? How do the characteristics and the philosophy of agroecology and agroforestry fit into the theoretical framework of ecological economics, given its fundamental assumptions? Finding the answers requires a thorough understanding of the nature of these concepts and their uses.

Hence, this article endeavours to unravel the interconnected nature of agroforestry and agroecology while also delving into their interface with the powerful paradigm of ecological economics, aiming to illuminate pathways towards regenerative and economically viable agricultural systems. The common principles and philosophy they share offer potential solutions for addressing urgent global challenges, including climate change, biodiversity loss, and the imperative for economically resilient food systems.

In this study first I introduce the concept of agroforestry and detail its ecological, economic, and social benefits, as well as some cases of the inadequate applications of agroforestry and misuses of the concept. I also synthesize the conditions found in the literature that allow these benefits prevail. The theoretical framework of agroforestry is provided by the discipline of agroecology. Hence, I provided a definition for the concept of agroecology and highlighted its properties, underscoring the significance of a paradigm shift away from the prevailing production-oriented, industrial agricultural practices. The characteristics of agroecology and agroforestry jointly answer how this approach fits into the paradigm of ecological economics, considering its positions and assumptions.

Materials and methods

I applied focused literature review for this study, on the one hand, to provide a comprehensive description of the three concepts relevant to the topic, on the other, to analyse and describe the relationship between them. I searched for relevant literature in English, Hungarian, and Spanish, combining the search terms “agroforestry”, “agroecology”, “ecological economics”, “environmental economics”, “sustainability”, “sustainable agriculture”, “ecosystem services”, and “land use management”. I employed the scientific databases of ScienceDirect and Springer, as well as the Google Scholar search engine to have access to information from a broad variety of platforms. My main sources were articles from academic journals and book chapters without a specific time frame, however, I also found relevant international reports, graduate thesis, and books. Specific Springer books and papers on agroforestry were especially useful, due to its wide range of publications in this topic. The relevant items of literature were selected due to their capacity of explaining the concepts studied and in what ways these are interconnected. A thematic classification of the papers was carried out and they were used in the analysis accordingly.

I consider agroforestry as the main concept of the paper. To comprehend it as a multidisciplinary concept and complex socio-ecological system, I focused mostly on its ecological, economic, and social implications, covering these three aspects of sustainability. At the same time, for its broader understanding it was necessary to analyse its conceptual framework and its relation to other key concepts. During my previous readings, I found that there is a strong link between agroforestry, agroecology, and ecological economics as a school of economic thought that has been gaining prominence in recent decades.

The following chapter on “agroecology and agroforestry as agroecological practice” provides a basic overview of the concept of agroecology and describes its relationship with agroforestry. For this chapter it is crucial to understand the different interpretations of agroecology and the historical context in which it emerges as a response to the production-oriented Green Revolution (later explained).

To analyse the nexus of agroforestry and agroecology with ecological economics, I drew upon the insights of prominent scholars in ecological economics, like Røpke and Martínez-Alier. Utilizing their delineation of

the fundamental beliefs and foundational assumptions of ecological economics as a reference point, I examined potential overlaps with agroecology and agroforestry. By this stage in the study, building on earlier findings, I presume that agroforestry practices fall within the broader realm of agroecology. Consequently, I integrate them conveniently into the analysis of their alignment with ecological economics.

Agroforestry and its ecological, economic, and social benefits within the literature

One of the most interesting means of resolving the contradictions between agricultural production and forest conservation, combining traditional and innovative methods, is agroforestry, a “form of land use that combines different agricultural sectors by growing woody plants (trees and shrubs) in a given place at the same time” (Keserű et al., 2018:76). Another, broader definition is that “agroforestry is a dynamic, ecologically based, natural resources management system that, through the integration of trees on farms and in the agricultural landscape, diversifies and sustains production for increased social, economic and environmental benefits for land users at all levels” (Buttoud et al., 2013:38).

Nair et al. (2021) distinguish three major categories of agroforestry systems: agrisilvicultural (crops and trees), silvopastoral (pasture/animals and trees), and agrosilvopastoral systems (crops, pasture/animals, and trees). Due to their structural basis, we can refer to the nature of the components, including spatial arrangement of the woody component, vertical stratification of all the components, and temporal arrangement of the different components. Further, purpose-oriented classification criteria can be the system’s function (major role or output), ecological distribution (rainfall, elevation), and its socioeconomic characteristics (subsistence, commercial). Practical examples of this classification systems can be: “an agrisilvicultural system for food production in the lowland humid tropics at a subsistence level of production, a commercial silvopastoral system for fodder and food production in lowland subhumid (or dry) tropics, an agrosilvopastoral system for food production and soil conservation in highland humid tropics, and so on” (Nair et al., 2021:32).

Gyuricza and Borovics (2018) emphasise that agroforestry as a practice worked out well for thousands of years. However, the mechanisation, the use of chemicals, and the emergence of large estate systems, which have

accompanied agricultural modernisation in more developed countries, have led to the separation of forestry and crop production, with many negative environmental impacts. Among these, the authors mention environmental problems such as soil erosion, wind erosion, water pollution, carbon release, loss of biodiversity, and reduction of habitats for natural enemies of pests. Climate change will only exacerbate these negative processes. At the same time, the negative social impact of this segregation is that farmers have lost part of their previous sources of income and increased their exposure to market risks by switching to monoculture farming.

The resurgence of agroforestry on a global scale shows that this ancient production method is making a comeback. This renewed interest is driven by its ability to boost productivity and crop quality, ensuring ecological safety. Additionally, it enhances the quality of life in rural areas by providing stable profitability and basic living conditions, offering diverse food options throughout the year (Tewari & Dagar, 2017).

The appropriate use of agroforestry practices can achieve different economic, social, and natural resource conservation objectives simultaneously, making it a beneficial land use in all three aspects of sustainability. In addition to its positive impacts on agricultural productivity and social well-being, experience shows that agroforestry contributes significantly to maintaining biodiversity, increasing connectivity between fragmented landscapes, restoring degraded ecosystems and mitigating and adapting to climate change (Montagnini, 2017). Pantera et al. (2021) highlights the environmental benefits of agroforestry, underlining its potential to create ecologically intensive agricultural production systems. In essence, agroforestry serves as a bridge between agricultural production and ecological considerations, promoting sustainable food security through the judicious use of natural resources. Moreover, it emerges as a promising strategy for developing countries, addressing food and water security, energy needs, and ecosystem and population health (Akamani & Holzmüller, 2017).

Agroforestry systems can provide a wide range of ecosystem services (Raj et al., 2019). Increased crop yields, tree biomass, livestock health and protection, improved soil fertility, efficient water use, increased income through increased production of wood products and Non-Timber Forest Products (NTFPs), promotion and conservation of biodiversity, and carbon sequestration and storage are some of the most important ones (Raj et al., 2022). José (2009) summarises the ecosystem services provided by

agroforestry systems and the related international scientific findings in four categories: carbon sequestration, soil improvement, biodiversity conservation, and air and water quality improvement.

On 25 September 2015, UN General Assembly member states adopted 17 Sustainable Development Goals (SDGs), also known as global goals, as part of a new sustainable development agenda to be achieved by 2030. Agroforestry can make a significant contribution to achieving many of these goals, like ending hunger (SDG2) through food security and sustainable agriculture; gender equality (SDG5); affordable and clean energy (SDG7); reducing inequalities within and between countries (SDG10); tackling climate change (SDG13); and protecting terrestrial ecosystems, mainly through sustainable management of forests (SDG15). However, taking into account the interlinkages between the SDGs, agroforestry can also contribute to a much broader set of development goals, such as the first goal of poverty eradication and the third goal of ensuring health and promoting well-being (Montagnini & Metzler, 2017). Noordwijk (2020) argues that agroforestry does not only make a significant contribution to the development goals related to agriculture and forestry separately, but also should be seen as an incentive for policy synergies between the development goals as a whole, due to its interactions with different landscapes.

Agroforestry can also be defined as a complex and adaptive socio-ecological system, based on natural (environmental richness and ecosystem processes as a whole) and human subsystems (the totality of human life skills and social relations, coordination of human activities) complemented by social, productive, and financial subsystems. The sustainability of agroforestry systems can also be assessed through the interaction and interdependencies of these subsystems, with human decisions playing a pivotal role (López et al., 2017). The resilience of an adaptive socio-ecological system, stemming from the interplay between social and ecological systems, can be developed through appropriate ecosystem management. Adapting these systems to change and achieving long-term social, economic, and ecological sustainability requires integrated land and water resource management. This entails considering the geographical scope of ecosystems and incorporating diverse forms of knowledge, including local indigenous knowledge. (Akamani & Holzmueller, 2017).

Given the uncertainties and unpredictability of social ecosystems, adaptive governance is important, which is defined as “flexible and learning-based collaborations and decision-making processes involving both state and nonstate actors, often at multiple levels, with the aim to

adaptively negotiate and coordinate management of social-ecological systems and ecosystem services across landscapes and seascapes” (Schultz et al., 2015:7369). For agroforestry systems, this concept is crucial due to issues like government regulations and policies affecting agroforestry globally; alignment of ecosystems with local cultures and farming methods; and synergies between indigenous ecological knowledge and modern science, with practical benefits derived from them, etc.

According to research on trends and conditions for the establishment of agroforestry worldwide (Glover et al., 2013), the most important socio-economic factors that play a role in the adoption of agroforestry by individual farmers are: the possibility of increasing household financial security; access to market information and to markets; secure land tenure for the adoption of a long-term land use system; availability of affordable labour for labour-intensive farming processes; size of landholding, which together with the availability of labour influences the choice of the type of agroforestry system; gender division of tasks within a community; availability of complex knowledge for agroforestry farming, especially the use and combination of indigenous knowledge with scientific knowledge; and appropriate financial incentives and government regulatory environment. At the same time, a number of studies have addressed the involvement of stakeholders, the use of participatory mechanisms in decision-making processes (e. g. collective planning of agroforestry systems) or knowledge transfer processes (e. g. combining indigenous and scientific knowledge, transfer of technological and market information) (Dumont et al., 2019; German et al., 2006; Lacerda et al., 2020).

Lasco et al. (2014) detail the economic and social benefits of agroforestry alongside its ecological functions. The economic benefits include, for example, improved productivity and profitability of farms, diversification of food and income sources, increased income, diversification of income risks and stabilization of livelihoods. Highlighting positive social impacts, the authors note the abundance of food and energy sources accessible to producers during extreme events, the social security derived from the sale of harvested timber during crises, and the diversification of diets through fruit production. After conducting a literature review on climate-smart agroforestry systems, Ntawuruhunga et al. (2023) underscores that the foremost economic and social benefit globally emanating from these land practices is food security. This is attributed to the diversification of species and products, coupled with the higher yields achieved

within these systems. Among the positive economic effects, the authors stress that many of the products of agroforestry have a high monetary value and reduce the producer's exposure to external shocks. The high yields of firewood from energy wood plantations, wood for other uses and forest by-products (fruit, fodder, etc.) can produce large quantities of biomass and enable farmers to generate higher incomes than monoculture farming. At the same time, the job creation potential of agroforestry is significant, not only in farming but also within the value chain.

Lehmann et al. (2020) showcasing the productivity and economic advantages of agroforestry systems in Europe, also emphasize the considerable benefit of these systems as a source of organic products. These products can be instrumental in establishing innovative value chains that concurrently contribute to rural development.

A concept often used in studies of the benefits of agroforestry systems is the land parity ratio. This ratio shows “how much land is needed to produce the yield of 1 hectare of agroforestry unit when farming is managed in separate areas of forestry and agriculture” (Honfy, 2023:34). A number of studies based on empirical data from countries with different conditions have used land equivalent ratio (LER) calculations to demonstrate that agroforestry systems implemented on a given unit area can achieve higher productivity than separate monocultures of the same crops (K. Solanki, 2018; Lehmann et al., 2020; Sun et al., 2017; Temani et al., 2021; Utomo et al., 2016; Yang et al., 2021). However, economic returns depend not only on productivity, but also on the quality that enables higher prices. For some crops (e. g. coffee), there is evidence that the ecosystem services provided by agroforestry systems can result in higher quality crops and higher profits than conventional agriculture, despite lower yields (Hernandez-Aguilera et al., 2019).

Some critical studies also address the downsides of agroforestry, when this form of land use does not have the expected positive effects, or the concept is too loosely defined and its use is inherently flawed (Mukhlis et al., 2022; Ollinaho & Kröger, 2021). The absence of agronomic knowledge among farmers to establish synergies between various components in a complex system can prove counterproductive both environmentally and economically. In some instances, expansive plantations funded by private capital give rise to a rigid “industrial” agroforestry model, contributing to species dominance and a decline in biodiversity. “Commercial” mixed plantations, geared towards specific agricultural commodities, can replace intact forests – a form of deforestation that presents

significant challenges when attempting to justify it under the label of “agroforestry”. It is only in degraded areas outside primary forests that it is recommended to initiate soil improvement and biodiversity restoration using agroforestry methods in a competent manner (Mukhlis et al., 2022).

Ollinaho and Kröger (2021) extend the prior line of reasoning by delineating three distinct types of agroforestry transitions: “the good, the bad, and the ugly”. In this classification, the “good” agroforestry transition, or the so-called “agroforestry”, stands out as ecologically beneficial for specific regions and contributes to the promotion of social justice. On the contrary, the “bad” agroecology refers to agribusiness forestry, which not only reinforces but institutionalizes large-scale agribusiness practices detrimental to the environment and exacerbates social inequalities. Lastly, it identifies as “ugly” those practices endorsing deforestation or the conversion of natural forests into tree plantations. Labeling these “bad” and “ugly” practices as agroforestry aims to present them as sustainable, although they unmistakably fail to align with the acknowledged definitions of agroforestry, inclusive of the sustainability criteria mentioned earlier.

García de Jalón et al. (2018) studied key stakeholders’ perceptions on the implementation and expansion of agroforestry in 11 countries of Europe, including its positive and negative aspects. The positive aspects of agroforestry identified by stakeholders were primarily environmental or production benefits, specifically, enhanced biodiversity and wildlife habitats, landscape aesthetics, soil conservation, and animal health and welfare. Meanwhile, main negative aspects were linked to management and socio-economic factors, including increased labour, complexity of work, management costs, the administrative burden and occasional predation by wild animals. According to the evidence of environmental and societal benefits perceived, authors propose four ways to promote agroforestry: national demonstration sites and education programs; improved regulation; providing a market for the positive externalities with agroforestry; and increasing the opportunities for new profitable businesses. The emphasis on these issues shows that the main constraints of wider adoption in Europe are mainly related to the political and economic environment.

Torralba et al. (2016) draw similar conclusions. Their meta-analysis based on 53 publications reveals that agroforestry typically boosts biodiversity and the provision of ecosystem services compared to traditional

agricultural and forestry practices in Europe. Nevertheless, the considerable variability in outcomes underscores the influence of biophysical factors and land-use conditions. Its success largely depends on the consideration of its inherent complexity in policy measures.

Further articles recognize overall positive environmental effects of agroforestry and address the importance of adequate economic and policy environments, flexible enough to adapt to local ecological and cultural circumstances, added to effective cooperation and knowledge transfer between key stakeholders (Pantera et al., 2021; Santiago-Freijanes et al., 2018). There are few studies at national or regional level on the complex environmental, social, and economic impacts of agroforestry, and as a result, policy makers lack confidence in this form of land use. This hampers the wider uptake of agroforestry (Mukhlis et al., 2022; Ollinaho & Kröger, 2021). The systematic literature review processing 591 primary articles and 41 other systematic literature reviews from 31 countries, conducted by Castle et al. (2022), evidences that topics like regulating ecosystem services outcomes and agricultural productivity of agroforestry in different contexts are well studied, while evidence on human well-being remains limited. The study highlights that there is limited information available regarding the effects of specific policy measures aimed at encouraging agroforestry. This gap in scientific research on agroforestry matches with the shortcomings in properly elaborated economic and policy incentives in a wide range of countries.

1. Table: Possible advantages of agroforestry and their conditioning factors

Possible advantages		Conditions to avoid negative outcomes
Ecological	<p>Improved soil fertility; efficient water use; increased connectivity between fragmented landscapes; promotion and conservation of biodiversity and wildlife habitats; carbon sequestration and storage (mitigation and adaption to climate change).</p> <p>(Gyuricza & Borovics, 2018; Jose, 2009; Montagnini, 2017; Pantera et al., 2021; Raj et al., 2019b, 2022)</p>	<p>Biophysical practices that enhance the overall biodiversity and soil ecosystems of the local environment and gradually increase the average age of perennial cultivation. Planting native tree species, other perennials and food crops using agroecological principles. Appropriate ecosystem management, integration of indigenous knowledge.</p> <p>(Akamani & Holzmueller, 2017; Lacerda et al., 2020; López et al., 2017; Mukhlis et al., 2022; Ollinaho & Kröger, 2021)</p>
Social and economic	<p>Diversification of income risks and stabilization of livelihoods; abundance of food (food security) and energy sources (available biomass); water security, evidence of higher productivity (LER); diversification of diets; reduction of social inequalities; overall health of the population.</p> <p>(Akamani & Holzmueller, 2017; Dagar & Tewari, 2017; Hernandez-Aguilera et al., 2019; Honfy, 2023; Lasco et al., 2014; Lehmann et al., 2020; Montagnini, 2017; Montagnini & Metzler, 2017; Noordwijk, 2020; Ntawurunga et al., 2023)</p>	<p>Access to market information and to markets; secure land tenure for the adoption of a long-term land use system; availability of affordable labour for labour-intensive farming processes & size of landholding influences the type of agroforestry system; gender division of tasks within a community; availability of complex knowledge for agroforestry farming (indigenous knowledge & scientific knowledge); effective involvement of stakeholders in decision-making processes; training opportunities; and appropriate financial incentives and government regulatory environment.</p> <p>(Akamani & Holzmueller, 2017; Dumont et al., 2019; García de Jalón et al., 2018; German et al., 2006; Glover et al., 2013; Lacerda et al., 2020; López et al., 2017; Schultz et al., 2015)</p>

Own elaboration based on the corresponding authors.

Agroecology and agroforestry as agroecological practice

The scientific framework of agroforestry from the perspective of sustainable food production is provided by agroecology, a very broadly applied, multi-disciplinary philosophy. This broad applicability also makes the term somewhat difficult to be defined. Rivera-Ferre (2018) argues that there are competing interpretations of the concept worldwide, and highlights three main interrelated approaches and interpretations of agroecology: agroecology as an agricultural practice, agroecology as a social movement, and finally agroecology as a discipline. Várallyay (2005) who adopts the latter approach, defines agroecology as “the field of ecological research that studies the causal relationships between populations in agricultural areas, human-regulated ecosystems and their environment” (p. 1).

A FAO (2018) The definition of agroecology obviously favours the agricultural approach, but it also reflects the broad, multidisciplinary nature of agroecology: “Agroecology is an integrated approach that simultaneously applies ecological and social concepts and principles to the design and management of food and agricultural systems. It seeks to optimize the interactions between plants, animals, humans, and the environment while taking into consideration the social aspects that need to be addressed for a sustainable and fair food system” (p. 1).

Emphasising the social aspects Altieri and Nicholls (2012) formulate the essence of agroecology as a transition from industrial agricultural systems based on fossil fuels and exports to an alternative agricultural paradigm. The latter would primarily be based on local and national food supply by dynamizing smallholder, family farms, building on peasant innovation, local resources, and solar energy. This will require access to land, seeds, water, credit, and local markets, as well as substantial public support, which is in fact a short summary of the land reform programmes of some developing countries.

Ujj & Fehér (2016) stress the importance of combining traditional peasant knowledge with modern agroecological knowledge. In this way, it is possible to optimise farming systems by applying a holistic approach to farming. Koohafkan & Altieri (2011) argue that agroecological systems are based on the ecological rationality of traditional agriculture, which has created thousands of successful agricultural structures. They have a wide variety of crops and domesticated animals, while being sustained by ingenious soil and water management and biodiversity systems derived from indigenous knowledge.

Rivera-Ferre (2018) in distinguishing between the three main conceptual understandings, adds that there are also different narratives within each approach, which can lead to different policy proposals. Generally speaking, a common thread across the field is the opposition to ecologically unsustainable industrial agriculture. Gómez-Echeverri et al. (2020) underline that agroecology has emerged as a response to the negative environmental and social impacts² of the so-called Green Revolution³, which increased productivity and was based on the principles of neoclassical economics. To briefly synthesise its meaning, agroecology aims to transform food systems to achieve sustainability, according to the principles of ecological responsibility, economic viability and social equity (Gliessman et al., 2007).

Agroecology therefore represents a paradigm shift from production-oriented, industrial agriculture. The differences between the two approaches are summarized by Sarandón & Flores (2014) in the following table:

² Increasing dependence on agrochemicals; contamination of food, water and soil and damage to health; development of resistance of certain pests and pathogens to pesticides; loss of soil productivity, nutrient loss; eutrophication of water resources, reduction of aquifer water supply; increasing dependence on fossil fuels and decreasing energy efficiency; loss of biodiversity; loss of genetic variability of major crops; displacement of some traditional farming techniques by supposedly universal ‘modern’ technologies (cultural decline); it contributed to global warming and ozone depletion; was not applicable to all farmers and did not solve the problem of rural poverty (Sarandón & Flores, 2014).

³ The Green Revolution represents a significant increase in agricultural productivity and the widespread adoption of industrial agriculture, achieved from the mid-20th century onwards using modern technologies such as improved crop varieties, fertilisers, and irrigation.

2. Table: Differences between production-oriented and agroecological approaches

Production-oriented approach, intensive agricultural production	Agroecological approach, sustainable agriculture
Reductionist	Holistic (aiming for completeness)
There is only one kind of agriculture	There are several ways of farming
Ethics is a “vague” value	Ethics is a core value
Lack of a systemic approach	Using a systemic approach
The importance of the components	The importance of interactions
Reducing or wrong definition of system boundaries	Broadening and redefining system boundaries
Recognises only scientific knowledge	It recognises scientific and also other types of knowledge
“Local” is not important	The “local” is important, endogenous potential
One use of the site	Multiple uses of the area: food, tourism, landscape, ecological services
Reduces the importance of socio-cultural aspects	The importance of socio-cultural aspects
Mainly based on input technologies	Mainly based on process technologies, minimising inputs
Technology created exclusively by scientists	The farmer is involved in the creation of the technology
Goals	
Short term	Long term
Production-oriented	Sustainability-focused
Focus on productivity	Focus on agroecosystems and related ecosystems
The economic analyses do not include environmental costs. “The false illusion of wealth”	Economic analyses include environmental costs.
Simple systems, low biodiversity (instability)	Complex systems, high biodiversity (stability)
Biodiversity is seen as a genetic resource	Well-functioning biodiversity is an essential structural, life-sustaining factor in agroecosystems

Agroecology studies the functioning of agroecosystems as practical, functional systems and promotes their practical sustainability. An agroecosystem is “any combination of habitats and organisms that are consciously influenced and regulated by humans in different ways, at different times, and at different grades.” (Várallyay, 2005:1). The key challenge in designing sustainable agroecosystems is to simultaneously maintain natural ecosystem characteristics and sustain productivity. To achieve this, first, the energy flow must be designed in a way that relies less on non-renewable inputs provided by humans and creates a balance between the energy flowing inside and out of the agroecosystem, mainly in the form of harvest. The second characteristic of a sustainable agroecosystem is that population control mechanisms operate within a system that, by increasing the number of habitats and allowing natural enemies to be present, enhances overall resistance to diverse pests and diseases. Finally, the third characteristic is the incorporation of attributes such as productivity, stability, viability, resilience, adaptability, equity and self-sufficiency, in order to provide the agroecosystem with the conditions to achieve a dynamic balance and thus a sustainable system (Gliessman et al., 1998). The structure of an agroecosystem is “the configuration or internal spatial arrangement of the broader agroecosystem, along with the interplay between its diverse sectors and vegetation corridors or production systems, facilitates the movement and interchange of various animal and plant species. This structure offers shelter, habitat, and sustenance, contributing to microclimatic regulation and influencing aspects such as production, the conservation of natural resources, and other ecosystems, as well as cultural considerations” (León Sicard, 2014).

Agroforestry in agroecological literature is mostly understood as sustainable land use and agricultural practices that adhere to agroecological principles (Rivera-Ferre, 2018; Rosati et al., 2021). “Agroforestry is an agroecological approach based on the diversification of the agroecosystem production components (trees/shrubs, crops and/or livestock) and on the intensification of the agroecological relationships that exist between these components in space and time” (Rosati et al., 2021).

Wezel et al. (2014) argue that different types of agroforestry practices can be considered agroecological practices, as they reduce nutrient leaching, conserve soil, increase the diversity of the production system, and produce wood for various uses. Prabhu et al. (2015) conclude that there is growing evidence in the developing world that the use of agroforestry as

an agroecological approach helps to restore the productivity and resilience of landscapes and contributes to food and income security for smallholders and other vulnerable groups in society. At the same time, the study concludes that although many of the ecological, social, and economic benefits of agroforestry have been demonstrated at farm and landscape scales, further investment and policy support is needed worldwide to take agroecology's practical potential to the next level and to truly unleash its potential on a large scale.

A nexus explored: the bond between Ecological Economics, Agroecology, and Agroforestry

Ecological economics' understanding of the relationship between the economy and nature differs from neoclassical environmental economics: it sees the economy as a subsystem of nature, since "no human economy can be imagined without the general life-support and other specific services of nature." (Pataki & Takács-Sánta, 2005). In his classic paper Boulding (1966) illustrates the divergence between two paradigms using the metaphors of the "cowboy economy" and the "Earth-spaceship economy". In the "cowboy economy", the expanses available for occupation and exploitation are deemed infinite. Consequently, both consumption and production, driven by the material transformation of production factors in the presence of seemingly boundless resources, are perceived as limitless and inherently desirable goals. In contrast, within the framework of a "spaceship economy" operating in a closed system, the resources available for exploitation and the potential for pollution are not infinite but restricted by the finite capacity of Earth's ecosystems. A crucial distinction lies in the fact that, contrary to the tenets of neoclassical economics, this economic concept seeks to minimize the material conversion capacity.

There is also a debate between environmental economics and ecological economics approaches on the concept of sustainability. The difference between so-called weak and strong sustainability can be described through the relationship between natural capital and economic capital. According to Szilávik's definition (2005:27-28) weak sustainability means the unlimited substitutability of nature: "According to this view, depleted natural capital can be freely replaced by economic capital. It follows, *inter alia*, that the combined value of the capital stock (natural and artificial capital) cannot be reduced (...) Therefore, in the extreme case, a world

without nature is a reality, where the functions of nature are taken over by the economy.” On the contrary, the concept of “strong sustainability” emerged within ecological economics, asserting that “natural capital must be preserved, as natural and human-made capital can only be substituted for each other to a limited extent.”

Substantial differences exist between the two approaches regarding the substitutability of natural capital for economic capital. These differences extend to matters such as the influence of economic growth and international trade on the natural environment, the role of technological change and innovation in sustainability, the correlation between economic growth and quality of life, and the perspective on the valuation of nature. “Ecological economists are more sceptical towards the possibilities for substitution, more critical towards the positive impacts of growth and trade, have less trust in the positive potential of technological change, are sceptical towards the idea that quality of life improves with economic growth in the rich countries, and more readily accept that nature has intrinsic value” (Røpke, 2005:275).

Given its distinctive features, it can be asserted that agroecology aligns with the theoretical framework of ecological economics in terms of the relations between economy and ecology. However, comprehending this connection requires a brief overview of the relevant aspects of the approach of ecological economics.

The founders of ecological economics share the concept of the economy as embedded in nature; the importance of nature as a life-support system; and the centrality of analysing ecological and economic systems and their interactions in terms of energy and material flows. Røpke (2005) briefly summarises the basic beliefs and founding assumptions of ecological economics:

- Because nature sets the limits of the economy, ecological economics argues that our economy has already reached or exceeded its maximum sustainable scale.
- The economy is embedded in a broader social and cultural system with nature, economy, society, and culture evolving together. Therefore, social, and institutional aspects must be included in the analysis of the economy.
- A trans-disciplinary approach and cooperation between disciplines is essential to understand environmental problems and develop solutions.

- The starting point of ecological economics is basic ignorance, that we do not know enough about nature and the interactions between humans and their environment. We must deal not only with general uncertainty, but also with not knowing what we do not know: that is, human intervention in nature can have a range of unintended consequences.
- The former involves applying systems thinking to dynamic processes, combining the traditions of natural sciences and economics.
- Considering the interests of future generations, the scale of economy needs to be limited, so equity and income distribution come to the fore. The latter is necessary to ensure that poverty eradication is not pursued through further, environmentally destructive growth.
- Nature has intrinsic value and is important not only because of people's needs.

One of the key concepts in ecological economics is social metabolism, which refers to the energy and material flows in the economy. “It measures the links between economic growth and use of energy and tests the absolute or relative dematerialization of the economy (relative to GDP) by studying material flows” (Martínez-Alier, 2012:52). In its general formulation, metabolism between nature and society begins when a group of people takes up materials and energy from nature (input) and ends when they dispose of their waste, emissions and residues in natural spaces (González de Molina & Toledo, 2014). Although modern farming has increased productivity per unit of work and per hectare, it has substantially reduced energy efficiency (Leach, 1975; Martínez-Alier, 2012). Some authors stress that achieving necessary yield growth faces constraints under the current paradigm due to resource and environmental factors in various regions. Balancing yield requirements with ecological constraints is crucial, highlighting the need for regional sustainable agroecosystem models. Additionally, demand-side factors like population policy, consumption efficiency, and equitable distribution become crucial in a world of constrained agricultural growth (Altieri & Nicholls, 2012b; Harris, 1996).

There is an intense global debate of the possibilities and limits of scaling up alternative agricultural practices based on agroecological principles in order to feed a growing world population (Dalgaard et al., 2003; Gomiero, 2018; Pittelkow et al., 2015; van der Ploeg et al., 2019). The

ongoing discussion includes issues like the effects of alternative agricultural practices on yields, their scalability, their feasibility under different farming contexts, and its maturity as a scientific discipline. Gomiero (2018) for example underlines that non-growth advocates want a more frugal lifestyle for agriculture based on local production and food self-sufficiency, low-input farming, and short food chains. However, according to the author, there is little evidence available to show how such systems can ensure the food security of an entire country, what the impact on social metabolism would be, or what direction society would have to take to become fully reliant on such alternative farming practices.

The importance of a trans-disciplinary approach and the need for a broader cultural and social system as a framework for analysis, which are basic assumptions of ecological economics, are also part of the foundational principles of agroecology and agroforestry. Many studies emphasise the importance of this approach to agroforestry systems research and landscape management strategy planning, especially the involvement of social sciences. This is particularly necessary for a holistic understanding of socio-ecological interactions in agroforestry systems, as solving institutional, cultural and social management problems in landscape management requires combining our biophysical knowledge with other forms of knowledge (Parker & Burch, 1992). On the other hand, it is essential to involve a wide range of key actors, to understand the economic costs of the transition, and to research and communicate the longer-term benefits of agroforestry in order to achieve wider adoption (Udawatta & Godsey, 2010).

A trans-disciplinary approach is needed to take account of the economic and social realities of agroforestry. The reasons for the social acceptance and use of this form of farming can be complex. In addition to economics and the operational efficiency of the system, aspects such as the values held by a given community, local land tenure relations, or the marketability of agroforestry products may also play a role (Montambault & Alavalapati, 2005). In an era of accelerated climate change, helping farmers to adapt to environmental change in a dynamic way based on indigenous knowledge also depends on our ability to understand, through research, the heterogeneous local ecological, social, cultural, and economic contexts and conditions for adopting agroforestry practices. Development policies and incentives must be adapted to these conditions (Lasco et al., 2014).

Contrary to the quantitative monetary valuation approach in environmental economics, which assumes comprehensive knowledge of nature's goods and services, ecological economics posits that our understanding of ecology is incomplete. The thesis underscores the limited knowledge about nature and the consequences of human activities on it. Ecosystems, intricate and regulated systems resulting from the interdependent associations of living organisms with the inanimate environment, are profoundly complex, where any single effect reverberates throughout the entire system. (Vida, 2001). Málovics (2020:39) explains in this context that “there is a high degree of uncertainty surrounding the nature of global biodiversity and its destruction, and the most effective means of halting this destruction. This situation is underpinned by the fact that if a species is removed from the ecosystem, the consequences cannot be known in advance because its role in the ecosystem and its impact on ecosystem functioning cannot be known.” Norgaard (1985) in his critique of environmental economics, draws attention to the complex dynamic interdependencies of environmental systems, which contradict economic models based on classical mechanical concepts that break down the system into its components.

Undisturbed natural systems, like part of the Amazon Basin, which provide habitats for an unprecedented number of species, are useful to illustrate this problem. As the number of connections within the ecosystem increases exponentially with the number of components, our taxonomic knowledge does not provide enough support for ecology to map these linkages (Norgaard, 1981). In such a complex system, uncertainty increases, and the consequences of any human intervention are extremely difficult to predict. In this case, a large amount of information is needed to properly manage socio-ecological interactions, e.g. in agricultural production systems adapted to local conditions. Therefore, production technologies developed in temperate, less diverse ecosystems cannot be effectively applied in the Amazonian context, while the economic exploitation of high-value species is hampered by the physical presence of commercially “low-value species” that play a vital role in the system as a whole (Norgaard, 1981).

The study of agroecology, understanding the interactions between nature and society and between global, national, and local processes, imply the need for systems thinking. The intricate interplay of environmental, economic, and social dynamics, coupled with market forces, agricultural policies, cultural nuances, and historical context in a specific region, go far beyond the scope of agronomic analysis. Addressing the complex,

challenging processes of anthropogenic climate change necessitates a holistic systems approach. (Casanova et al., 2016). Examining the agroecosystem as an intricate network of interconnected elements aligns seamlessly with the systems and multidisciplinary approach characteristic of ecological economics.

The concept of natural capital, which includes renewable and non-renewable resources, is connected to the so-called concept of ecosystem services. This concept emphasises the importance of ecosystems as factors without which any human economy, prosperity and social development would be impossible (de Groot & Braat, 2015). Ecosystem services are generated by ecosystem processes, which are the result of biodiversity (Málovics, 2009). Like ecological economics, which takes an ecosystem approach to understanding the links between the economy and the environment, agroecology emphasizes the application of ecological principles to agriculture, viewing farms as ecosystems (see the previously mentioned concept of agroecosystem).

A key principle in agroecology emphasizes minimizing external inputs and efficiently utilizing endogenous potential. One key focus within ecological economics research is the effective and sustainable utilization of natural resources, incorporating traditional ecological knowledge. The acknowledgment and practical implementation of this knowledge in agriculture have seen increased prominence since the indigenous rights movements of the 1980s (Reyes-García, 2015). The agroecological approach has a fundamental interest in non-scientific, traditional forms of knowledge, while a significant body of research on agroforestry deals with indigenous technologies from all over the world (McNeely & Schroth, 2006; Montambault & Alavalapati, 2005).

Conclusions

Agroforestry is a sustainable land use practice with multiple ecological, social, and economic benefits at the farm and landscape scales that adheres to agroecological principles. Agroecology can be defined as a practice, as a social movement, or a discipline. It embodies an alternative approach with ecological principles to the design and management of food and agricultural systems, and is opposed to ecologically unsustainable, large-scale industrial agriculture.

Agroforestry and agroecology align with the principles and assumptions of ecological economics. They share the idea that our modern farming and food systems are part of an unsustainable global economy constrained by ecological limitations. Agroecology aligns with the principles of embeddedness in nature, an emphasis on socio-ecological interactions, and the recognition of the intrinsic value of nature. The trans-disciplinary approach, a cornerstone of ecological economics, is inherent in both agroecology and agroforestry. These concepts embrace systems thinking, necessary to understand ecosystems and complex human-environment interactions. Within their own fields, agroecology and agroforestry address equity and distribution issues, key to limit ecologically destructive growth.

While evidence supports agroforestry's potential, further global investment and policy support are essential to realize its practical potential on a larger scale.

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KÖNYVISMERTETÉS/BOOK REVIEW

Generative Artificial Intelligence in Marketing: A Theoretical Perspective on Modern Marketing Processes

*Cedric Bartelt*¹

[M. Runia, P., Wahl, F., Geyer, O. & Thewissen, C. (2019). *Marketing: Prozess- und praxisorientierte Grundlagen*. Berlin, Boston : De Gruyter Oldenbourg. DOI: <https://doi.org/10.1515/9783110584677>]

Keywords: *Marketing, Disruptive Technologies, Artificial Intelligence, Generative Artificial Intelligence*

JEL Codes *C45, L10, M31, O33, Q55*

“Marketing: Prozess- und praxisorientierte Grundlagen” by Runia, Wahl, Geyer, and Thewissen (2019) offers a comprehensive exploration of marketing from both theoretical and practical perspectives in seven chapters and spans 406 pages. The textbook begins with foundational marketing concepts and theories, progressing to detailed analyses of market environments, consumer behavior, and competitive landscapes. It then outlines corporate and marketing strategies, delving into systematic approaches such as segmentation, targeting, and positioning, alongside discussions on product development, pricing, distribution, and communication strategies. The latter sections of the book concentrate on the practical application of these strategies in real-world contexts, emphasizing the significance of integrated and cross-media communication in contemporary marketing. The text concludes with comprehensive sections on marketing control and planning, ensuring that strategies are effectively implemented and adapted

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to meet evolving market demands. This makes it an essential resource for both students and practitioners in the field of marketing.

From an academic perspective, a comparison with the works of Meffert, Burmann, Kirchgeorg, and Eisenbeiß (2019), Bruhn (2019), and Kotler (2023) can be used to assess the academic value of this textbook. Unlike Meffert et al. who focus on the development of digital marketing, including topics such as big data and the customer journey, Runia et al. place more emphasis on process- and practice-oriented marketing fundamentals. While both works recognize the importance of digitalization, Meffert et al. provide a more detailed examination of digital transformation, particularly in terms of customer relationships and communications. Bruhn's work, known for its focus on interactive communication tools, addresses marketing fundamentals with a practice-oriented approach, while Kotler combines classic marketing concepts with the challenges posed by globalization, technology and social responsibility through a broader, multidisciplinary lens. Meffert's exploration is deeply analytical, often integrating case studies that illustrate the practical implementation of digital strategies in business environments. In contrast, Runia et al. approach is more holistic, aiming to provide readers with a solid grounding in marketing principles that underpin both traditional and digital marketing arenas. While Kotler's text is also broad, it is distinguished by the inclusion of contemporary issues such as sustainability and ethical marketing, which are less emphasized in Runia's more traditional structure. This makes Kotler's work particularly relevant in a globalized market context, offering insights into how marketing practices can be responsibly adapted in different cultural settings.

In their work, Runia et al. address integrative communication concepts such as integrated communication and cross-media communication, which are important for application in corporate practice, especially in the context of generative artificial intelligence. Integrated communication, which aims at a consistent implementation of the communication strategy through the content-related, formal, and temporal coordination of all communication instruments (Runia, P. et al., 2019), is indispensable for companies in the age of artificial intelligence. It enables thematic consistency across different channels, which is essential for AI-based communication tools such as chatbots or automated social media campaigns (Enshassi, M. et al., 2024). Cross-media communication, in which different media are linked to achieve communicative added value (Runia, P. et al., 2019), can be optimized using generative artificial intelligence (Mutoffar, M. M. et

al., 2023). From a practical perspective, AI technologies can help to make the selection and coordination of different media more efficient, for example by using data analysis to determine optimal publication times or to personalize content (Chukwudi, C. et al., 2023). A practical example would be the use of generative artificial intelligence to analyze customer interactions on coherent platforms to ensure seamless and cross-platform customer communication (Chen, B. et al., 2023; Feuerriegel, S. et al., 2023; Kshetri, N. et al., 2023). Based on this, a medium-sized company could provide detailed information about products or services and personalized offers across all platforms.

“Marketing: Prozess- und praxisorientierte Grundlagen” is an essential resource for both aspiring marketers and experienced professionals. The textbook systematically covers the breadth of marketing fundamentals and delves into complex marketing strategies that are essential in the digital age. This comprehensive coverage makes it an essential addition to both academic and professional reference libraries. Unlike other texts that focus on either theoretical foundations or practical applications, Runia et al. offer a balanced perspective in the marketing literature. The book provides readers with a solid framework for understanding and implementing effective marketing tactics through its structured approach to explaining core marketing principles, along with detailed explorations of market analysis, strategy formulation, and the use of marketing tools. In addition, the book provides a solid foundation for linking the integration of traditional marketing strategies with the use of digital marketing tools and artificial intelligence. The emphasis on integrated and cross-media communication strategies is particularly relevant in today’s fragmented media landscape, where marketers are challenged to maintain a coherent message across multiple platforms. For those interested in a more profound understanding of how marketing theory can be applied in real-world scenarios, especially in the context of digital transformation and AI, this textbook provides both foundational knowledge and advanced insights. It serves not only as an academic textbook, but also as a practical guide for implementing complex marketing strategies in diverse market environments.

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Das Krankenhaus-MVZ Planung, Aufbau, Betrieb

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[Goepfert, A., Bühn, R., Conrad, C. B. & Kühn, F. H. (eds, 2016). *Das Krankenhaus-MVZ : Planung, Aufbau, Betrieb*. MWV Medizinisch Wissenschaftliche Verlagsgesellschaft. p. 317, ISBN 9783954662296]

Abstract: The first edition of the book was published in 2016 with 317 pages and four chapters by the lead authors and editors Dr. Andreas Goepfert, Rainer Bühn and Claudia B. Conrad. It is an anthology written by a total of 23 authors. The co-authors are Klaus Axmann, Dr. med. Gerd-Rüdiger Franke, Oliver Frielingsdorf, Dr. Rolf Hildebrandt, Prof. Linus Hofrichter, Dr. rer. medic. Manuel Iserloh, Dr. med. dent. Thorsten M. Kehr, Axel Kühn, Felix H. Kühn, Dr. rer. pol. Philipp Lindenmayer, Thomas M. Lüttgen, Susanne Müller, Thomas Pfeifer, Anja Riedinger, Wilhelm Schierle, Dr. iur. Hendrik Bernd Sehy, Nadine Sterley, Michael Stoll, Dr. med. Roland Strasheim und Nils F. Wittig. The book is primarily intended to provide hospital medical care center founders with detailed information on the necessary planning, establishment and operation of a medical care center. It points out possible barriers that could lead to restrictions and explains what is necessary for successful operation.

Keywords: *Medical care centers, outpatient care, hospital ownership*

JEL Codes *I15, I18, I13*

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Dr. Andreas Goepfert studied human medicine in Marburg and then completed his medical qualification as a specialist in anaesthesiology. He also earned a degree in health economics and has been a member of the Management Committee of the Ansbach Clinic (trading as ANregiomed since 2013) since 2012. Rainer Bühn trained as a travel agent and then completed a degree in business administration at the Ravensburg University of Cooperative Education. He has been Managing Director of MVZ Region Franken GmbH since 2013 and also Managing Director of MVZ am Klinikum Ansbach GmbH since 2015. Claudia B. Conrad first completed her specialist training in nephrology dialysis after graduating in nursing. She also studied applied health sciences at the University of Bielefeld. She has been a managing director of ANregiomed gKU since 2016.

Summary

The topic on which the book is based was already being discussed in many different ways 40 years ago. At that time, it was still referred to as the “interlocking of outpatient and inpatient care”, because even at that time, medicine was already developing in such a way that more and more illnesses could or wanted to be treated on an outpatient basis. Although it initially remained largely a political discussion, the approach slowly began to gain momentum over the years. The decisive turning point for medical care centers came in 2004: the statutory health insurance modernization law created the possibility of establishing such an institution in the first place. Initially, the merger of at least two specialties was possible. Since mid-2015, it has also been possible to establish medical care centers with the same specialty groups. While the number of medical care centers was still 1938 in 2012, it rose to a total of 2490 in 2016 following the relaxation of the requirement to establish medical care centers with the same specialty groups. The number of hospital-owned medical care centers now accounts for 40% of the more than 2000 medical care centers in Germany (Kassenärztliche Bundesvereinigung, 2021). The institute of medical care centers has spread rapidly in Germany. One reason for this is the fact that medical care centers can be founded not only by doctors in private practice, but also by hospitals. The hospital medical center is a model for the future, even if the regulations

governing the establishment and operation of the institute are deeply rooted in inhomogeneous legislation.

The book is divided into four large chapters, each of which has further sub-chapters. The table of contents is as follows:

I. General conditions

1. Market-regulating mechanisms
2. Legal framework
3. Medical care center market

II. Structure and organization

1. Organization and management structure medical care center
2. Performance areas and processes
3. Structural features of the hospital medical care centers
4. Structural organization in medical care centers
5. Communication in organization and operation
6. Ethics vs. economics - added value of the medical care center structure using the example of chronic inflammatory bowel disease
7. The medical care center as an employer

III. Interfaces

1. The medical care center in the field of tension between sectors Economic planning
2. Reporting and key indicators
3. The future of outpatient care

IV. Operational management

1. The importance of hospital medical care centers
2. Strategy and understanding of hospital medical centers
3. Acquisition of doctor's practices and the importance of the expert opinion
4. Takeover and integration of medical care centers
5. Risks in the management of a medical care center

The first chapter deals with the framework conditions of hospital medical centers. Within the market-regulating mechanisms, the basics of the statutory health insurance system are discussed. At this point, among other things, the so-called demand planning is discussed, the question of the respective status and demand for statutory health insurance physicians within the scope of defined planning areas (Gemeinsamer Bundesausschuss, 2023). The licensing requirements pursuant to Section 95 (1) sentence 2 of the German Social Code, Book V are also explained. This states that medical care centers are “physician-led facilities in which physicians who are entered in the medical register [...] work as employees or contract physicians” (Hänlein and Schuler, 2022). In the context of financing and budgeting, the overall remuneration, the uniform valuation scale and the distribution of fees are discussed, with the billing of contracted, private and individual healthcare services being examined last. The legal framework is explained in particular through the historical presentation and development of medical care centers. In addition, possible legal forms for establishing hospital medical centers are discussed and the respective advantages and disadvantages are explained. The GmbH is a typical legal form for hospital medical centers. The chapter concludes with the medical care center market, which focuses on the political and public interest in the institution. There are explanations of external influences on hospital medical centers and also how to handle media such as the press, television and social media.

The second chapter is dedicated to the structure and organization. Hospital operators are increasingly recognizing the strategic and operational added value of outpatient facilities, and yet this poses enormous organizational and communication challenges for the facility itself. In particular, communication with all those involved, including those from the hospital, is what makes the complex structure manageable. The book uses the employer of the three editors, the municipal hospital association ANregiomed, as an example of this. A site concept including a radiology service process is presented as an example to illustrate this. In addition, the management structure, the management and the motivation of the employees are also discussed. The topic of structural features in the context of outpatient care is also addressed, as is the organizational structure as such, but also communication during construction and operation as a management task. The role of ethics versus economics is also examined in detail. How is an ethical doctor defined and what should be done if a medical care center cannot be run economically? Such an institution is only as good as

the cooperation and willingness of its employees. Finally, the medical care center as an employer is presented in the large topic area of structure and organization. What advantages can a doctor who is employed in a medical care center have over a doctor who is self-employed or works in an individual surgery? Many doctors are also working in hospital medical centers and enjoy a combination of employment in the inpatient and outpatient sector. Above all, however, they have one advantage: security. In a hospital medical centers, they are not subject to self-employment.

The third chapter deals with interfaces. In addition to the current framework conditions of the Association of Statutory Health Insurance Physicians, the preparation of a business plan for a hospital medical centers is discussed in particular. Which influencing factors are decisive for the profitability of a hospital medical centers and how and in what form should reporting and key figures be presented.

The fourth and final chapter, focusing on operational management, mainly describes the provision of care within a hospital network. In order to be successful, facilities must be fast and active, especially in strategic and operational action. Furthermore, a good and future-oriented strategy must be developed in order to be successful on the healthcare market. This also includes the acquisition of new doctor's surgeries, which must be strategically decided within the hospital operator. Even if the growth of medical care centers has increased constantly in recent years, there are also risks in terms of operational management. Accordingly, the acquisition of practices or even companies should always be preceded by an expert evaluation.

Usability in business practice

In “Das Krankenhaus-MVZ Planung, Aufbau, Betrieb”, the content is structured and presented in such a way that all areas are explained in detail, from the framework conditions of a hospital medical center to the structure and organization, to the interfaces and operational management. The book offers managing directors, contract physicians and other potential founders a gradual guide to setting up hospital medical centers. It can also be used after the foundation to optimize internal processes, such as business planning. Supporting the takeover and integration of other medical care centers is also an interesting topic. Strategic decisions are particularly important in the ongoing operation of medical care centers. The

specific question of a cooperation or the expansion of the medical care center structure should be examined according to the various aspects. It should be determined what the basic motivation is, whether an increase in profitability can be achieved, whether the competitive position will improve and whether quality will improve (Albrecht et al., 2022).

Reading recommendation

In summary, it can be said that the work by Goepfert et al. is no longer up to date due to the constantly changing laws, but is nevertheless recommended reading for anyone who is thinking about setting up a medical care center or even running one.

The book offers contract physicians, managing directors and controllers the necessary basic knowledge to correctly manage and implement processes in a medical care center from the very beginning. Even though it was written specifically for hospital medical centers, it also offers medical care centers with other types of ownership the opportunity to gain know-how, expand their own knowledge and shed new light on internal company processes.

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